

No. 4231

IN THE
United States Circuit Court of Appeals
FOR THE 3
NINTH CIRCUIT

D. J. MURRAY MANUFACTURING
COMPANY, a corporation,

Appellant,

vs.

SUMNER IRON WORKS, a corporation
and SILVERTON LUMBER COM-
PANY, a corporation,

Appellee.

APPELLANT'S BRIEF

*Upon Appeal from the United States District Court
for the District of Oregon*

T. J. GEISLER

Attorney and Counsel for Appellant

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HON. R. S. BEAN, Judge.

This is an appeal from the decree adjudging invalid and void, for lack of invention, Claim 12 of the patent granted to Charles E. Cleveland, September 7, 1909, No. 933,231, for an improvement in Log Loading

Mechanism, commonly called a *Log Turner*; and on such claim alone this suit was brought.

The appellant corporation is a manufacturer specializing among other things in saw mill machinery; and is the assignee of the entire interest in the patent.

The appellee Sumner Iron Works also specializes in saw mill machinery, and the controversy arose by this appellee entering the field *competitively* against appellant, with knowledge of said patent, and by choice making and selling a log turner which embodies the identical combination described in said Claim 12.

The appellee Silverton Lumber Company is using one of the log turners manufactured and furnished by the Sumner Iron Works.

The Appellee Summer Iron Works Had Direct Notice of Said Cleveland Patent.

Mr. Sumner, Vice-President and General Manager of this appellee corporation, testified on cross-examination (Trans. 39):

Q. Did you receive any advices or notice from the plaintiff that you were infringing the Cleveland patent in suit?

A. Yes, I think we had a letter shortly * * * shortly after the Murray people had purchased the patterns and drawings, and whatever it was from

the Geddings & Lewis people, and saying that * * * we were infringing, and I think we answered them back and cited the information that we had from Washington, and I would imagine that that was two or three or four years ago, sometime ago anyway.

The assignment of the Cleveland patent to the appellant so referred to is dated March 30, 1917. (Trans. 156.)

The pleadings raised the usual issues of patent suits.

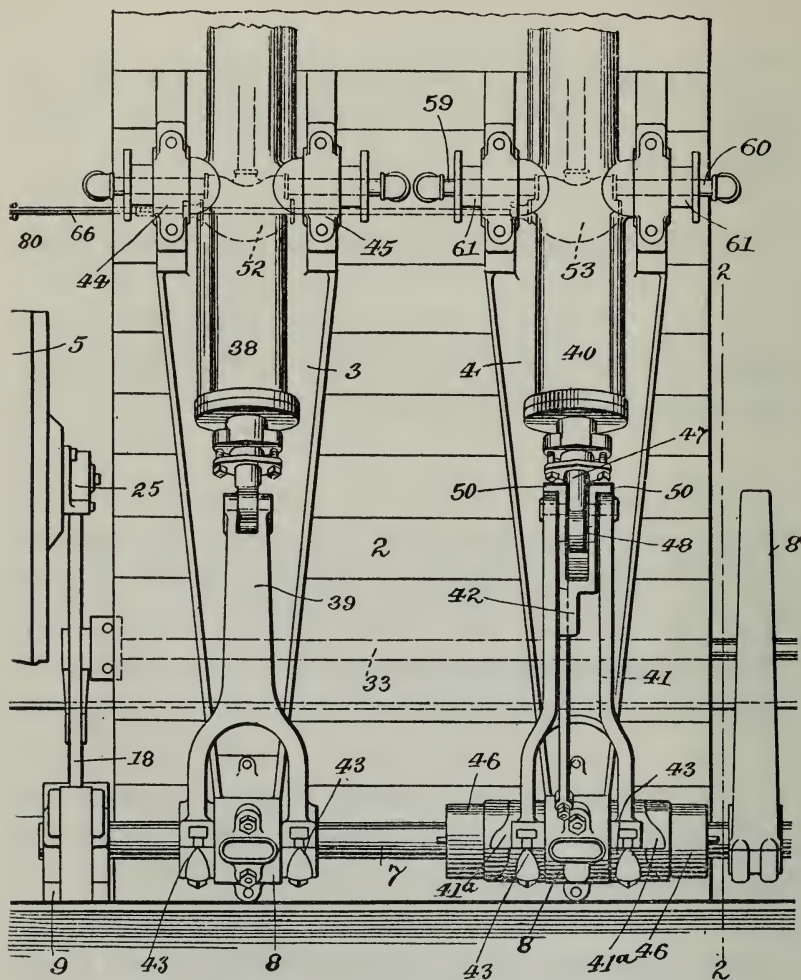
A copy of the Cleveland patent (Plaintiff's Deposition, Ex. A, Trans. 28, 155-290) is, for convenience inserted at the end of this brief.

Infringement of Claim 12 was conceded by appellees prior to the trial of the case by their answers to the interrogatories filed by appellant under Equity Rule 58. (Trans. 14.) Such answers stated below. Thus the only question involved is:—Is said Claim 12 valid?

The combination in question appears twice in the Cleveland log turner; once in the push-arm 39 and again in the hook-arm 41.

The elements of the combination stated by said Claim 12 comprise the following parts, all clearly shown by said Fig. 3 of said patent, which for convenience sake is here produced.

Left hand portion of Fig. 3 of the drawings of
Cleveland's patent.

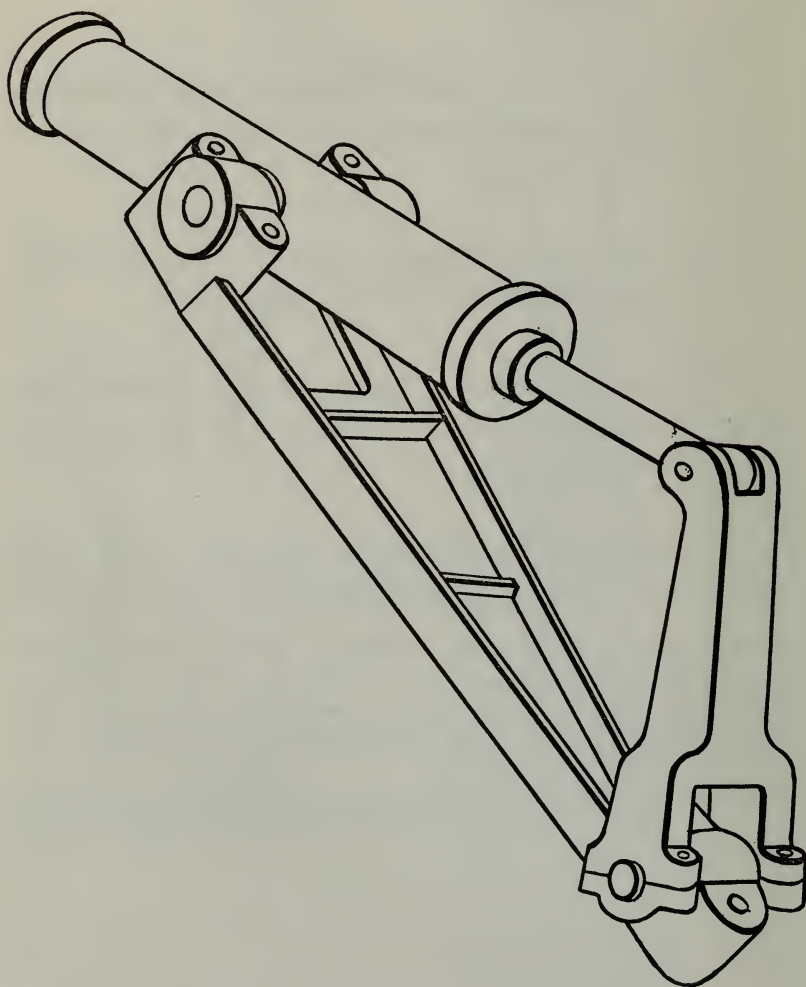


The claim reads:—

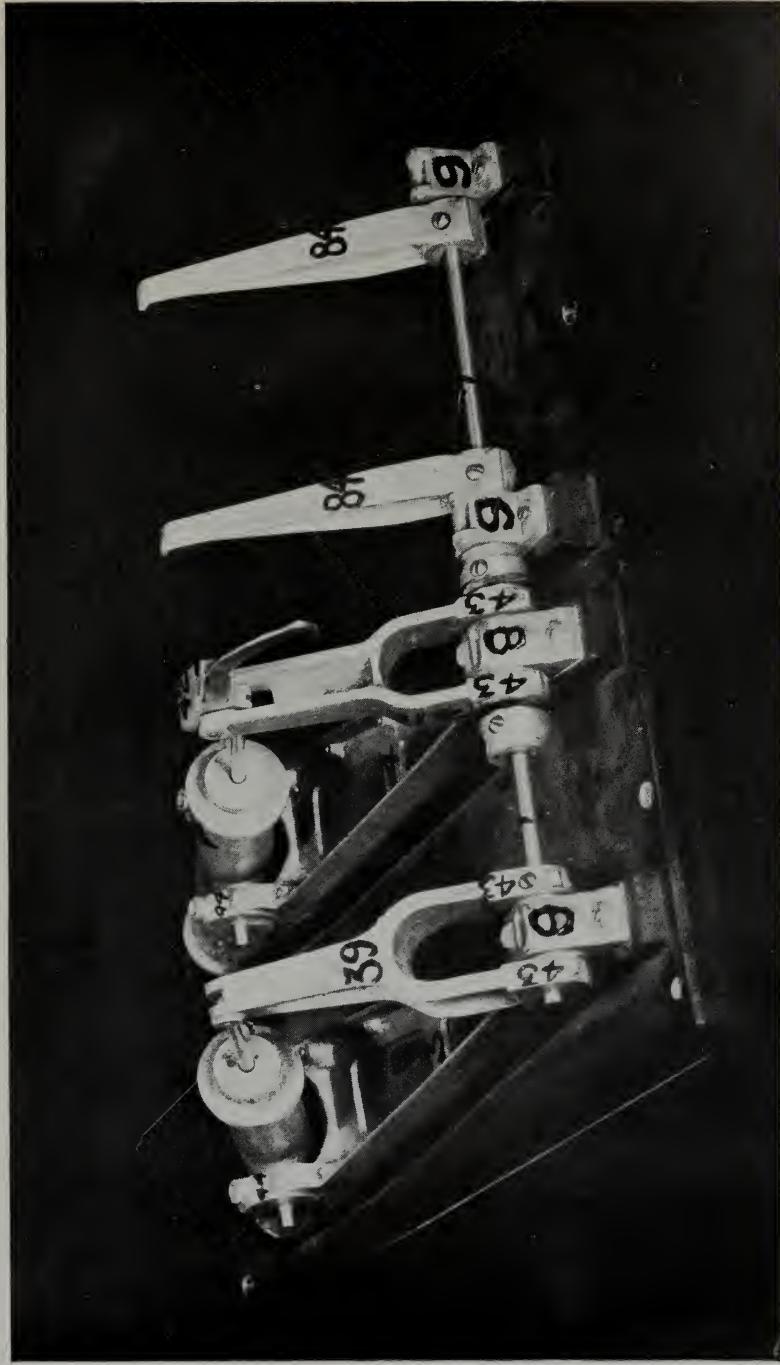
- (a) “A bed-plate (3 or 4) provided at its outer end with a shaft-bearing (8);
- (b) A shaft (7) extending through said bearing;
- (c) An arm (39 or 41) in operative relation with the shaft;
- (d) *Said arm being bifurcated and straddling the bearing formed upon the outer end of the bed-plate;*
- (e) A power cylinder (38 or 40) pivotally mounted upon the bed-plate;
- (f) A piston-rod working in the cylinder and connected at its outer end to the adjacent end of the arm.”

A model of the combination covered by said Claim 12 is shown by Plaintiff's Exhibit 10, a photo cut of which is given in the Transcript p. 285, and is here inserted for convenience.

The combination as embodied in the unit composing the “push arm” of the patent is also shown by Defts’. Ex. 26, an outline cut of which will be found in appellant’s Supplement of Exhibits to the Transcript of Record, p. 7, and such cut is for convenience given here also.

DEFENDANTS' EX. 26 (*Trans. 66*)

Photographic Reproduction of Model of Cleveland Log Turner
PLAINTIFF'S EXHIBIT 10



Patentee Cleveland in the specification of his patent described the purpose of his invention and its operation—with respect to the combination covered by said Claim 12—as follows:

(See patent, page 1, lines 9 to 14 inclusive)

“My present invention pertains to an improved log-handling mechanism designed more particularly to load the log onto a saw mill carriage, to turn the same after a slab has been cut therefrom, to elevate and replace the log on the carriage.

* * * * *

“The main object of the present invention is to produce a *simple and efficient* loading mechanism by which the log may be readily placed upon the saw mill carriage, removed therefrom and turned, and again replaced. (Ib.. p. 1, lines 44 to 48 inclusive.)

* * * * *

“Another object of the invention is to provide a *superior form of bed-plate*, upon which the power cylinders are mounted, and further, *to so form the main push-arms that they may have a more extended and firmer bearing on their supporting shaft*. (Ib. p. 1, lines 64-69.)

“A shaft 7 extends along the framework parallel to the runway or track of the carriage, at the lower end of the skid-way, the shaft passing through *bearings* 8 formed at the outer ends of the bed-frames or plates 3 and 4 and through suitable

pillow-blocks 9 arranged to one side of the skid-way 5 as indicated in Fig. 3. (Ib. p. 1, lines 92-99.)

“Each of the cylinder supporting bed plates 3 and 4 is alike in form, being a broad, straight casting provided at its outer end with a bearing 8 which embraces the shaft 7, and with bearings 44 and 45 for the trunnions of the cylinder. As will be seen upon reference to Fig. 3, the lower or outer end of each of the arms 39 and 41 is forked or bifurcated, the members or bearings 43 making a close fit against the boxes or bearings 8. Thus said arms get a relatively wide bearing upon the shaft and the parts all serve to mutually support and sustain each other, the straight and relatively broad bed-plate standing the strains to which it may be subjected much better than the usual crooked plates now in use.

“The arm 39 is made fast to shaft 7 and serves to rotate the same. Arm 41, however, is swiveled on the shaft, being provided with jaws 41a which function with clutch collars 46, keyed to the shaft 7. Said collars assist in maintaining the arm in place, and likewise, when the arm is thrown upwardly, cause the shaft 7 to rotate and thus cause all of the arms (39 and certain helper arms 84 hereinafter referred to) to move up against the log and prevent the same from skidding when the hook pulls the log over.

“The piston-rod 47 of the power cylinder 40 is pivotally connected at 48 to the hook 42. * * *

The hook arm 41 is bifurcated, and is provided with outwardly extending wings 50, which when the piston-rod is moved outwardly and the hook consequently thrown upward, pass about the end of the arm 41 until they enter the depressions 51 (Fig. 2) formed in the under side of the arm 41. Further outward movement of the piston rod actuates the arm 41 directly as the hook and arm are at such time locked together and move as one."

(Ib. p. 2, lines 112 to 130 inclusive, and page 3, lines 1 to 25, inclusive.)

The Concession of Infringement

by appellees is found in their answers to the following interrogatories propounded by appellant, viz:

"9. Referring to Fig. 3 of the drawings forming part of the Cleveland patent here in suit; was there at the date of the commencement of this suit, used in the plant of the defendant, Silverton Lumber Company, log handling mechanism having a straight bed-plate like that marked 4 in said figure? A. *Yes.*

10. If so, did said bed-plate have a bearing like that marked 8 in said figure? A. *Yes.*

11. If so, did a shaft pass through said bearing like the shaft 7 of said figure? A. *Yes.*

12. If so, did said log handling mechanism also embody a cylinder and piston like 38 in said figure? A. *Yes.*

13. If so, did the mechanism embody an arm connected to said piston like the arm 39 in said figure? A. *Yes.*

14. If so, did said arm terminate in a bifurcation straddling said bearing on the bed-plate in similar manner as in said figure? A. *Yes.*

15. Was said log handling mechanism installed in the plant of the Silverton Lumber Company furnished directly or indirectly by the defendant, Sumner Iron Works? A. *It was furnished directly by the defendant, Sumner Iron works."*

The Prior Art Was Shown by Appellees To Be as Follows:

Prior to answering the bill appellees propounded on their part the following interrogatories: (Trans. 12).

"16a. State whether the subject matter illustrated in the accompanying photographic print marked Defendant's Interrogatory—Exhibit "B" is or is not a substantial representation of the "usual crooked bed-plates now in use" which are referred to in the words last quoted in line 128, page 2 of the specification of the patent in suit. A. *It is.*

17a. State whether said exhibit is or is not a substantial illustration of what is known as the Simonson Log Turner.

A. *This exhibit does illustrate the log turner referred to.*

18a. State whether the log turner shown in Defendants' Interrogatory—Exhibit "A" was or was not known to be of public knowledge or use in the United States before April 13, 1907.

A. *Yes, according to plaintiff's information, but plaintiff has no definite knowledge."*

These Exhibits will be found on Pages 288 and 289 of the Transcript.

Appellees' answer sets up twenty-one alleged anticipating patents marked Defendants' Exhibits 1 to 20 inclusive—one exhibit being marked 51½. These patents are to be found beginning on page 178 of the Transcript. They are not specifically considered by the lower Court in its opinion. (See opinion, Trans. p. 167.)

Appellees allowed these patents to speak for themselves as it were, for they did not explain their pertinency to the issue, except in pointing out by these exhibits those types of log turners which constituted the prior art when Cleveland entered the field; also for showing the use of a bifurcated arm *per se* as an element in various types of machinery, which of course no one disputes.

Appellant will state briefly only the construction apparent from the drawings of these patents.

Defendants' Exhibit 1, patent No. 48658, granted to Collier July 11, 1865. This invention relates to a Harvester Pitman. Its pertinency not explained by appellees; probably introduced merely to show the use of a bifurcated arm.

Defendants' Exhibit 2, patent No. 121,355 to Godwin, dated November 28, 1871. This patent relates to an improvement in Oscillating Engines. Its pertinency to the issue was not explained by appellees.

Defendants' Exhibit 3, patent No. 134,117 to Wheeler, dated December 17, 1872, relates to an improvement in Pitmen. Its pertinency is not explained.

Defendants' Exhibit 4, patent No. 309,103, to Schofield, dated December 9, 1884, relates to a log loader of a wholly different type of mechanism than here in issue. Pertinency not explained.

Defendants' Exhibit 5, patent No. 382,760, to Erwin, dated May 15, 1888, relates to improvement in Air Compressor. Pertinency not explained.

Defendants' Exhibit 5 $\frac{1}{2}$, patent No. 408,760, to Simonson, dated August 13, 1889, for improved Log Lifting and Turning Machine. This patent was what is believed to be the first or rudimentary example of the so-called Simonson type of log turner. It shows the provision of a power operated push arm (d) and hook arm (d n), the latter being operated by a rope (s).

Defendants' Exhibit 6, patent No. 448,588, to Simonson, dated March 17, 1891, for Log Lifting and Turning Machine. This patent apparently is a refinement of the original Simonson Log Turner.

Defendants' Exhibit 7, patent No. 448,590, to Simonson, dated March 17, 1891, for an improvement

in Log Loader and Turner. This apparently shows a variation in construction of the original Simonson Log Turner.

Defendants' Exhibit 8, patent No. 448,591, to Simonson, dated March 17, 1891, for a Log Lifter and Turner, apparently another variation of the original Simonson Log Turner. Much ado was made about this patent because it embodied what was termed by appellees a bifurcated arm (E). Patentee describe this part in his specification (p. 1, lines 38 to 42): "E E are two arms secured on shaft C a short distance apart, and in the upper end of these arms is pivoted the hook F, which when down rests on a block e, secured between arms E.

The purpose of this arm E *has nothing in common with the Cleveland arms 39 and 41 of his patent which are bifurcated in order that they may straddle the bearings 8 on the outer ends of the bed plates 3 and 4 respectively.*

And it is to be noted that the construction here shown does not include a bed-plate. (See test of Thomas for appellees, Trans 75.)

Defendants' Exhibit 9, patent No. 448,592, to Simonson, for Log Lifter and Turner, dated March 17, 1891. This patent shows a further refinement of the Simonson Log Turner.

Defendants' Exhibit 10, patent No. 448,593, to Simonson, dated March 17, 1891, for Log Lifter and

Turner, also apparently shows a further refinement of the Simonson Log Turner.

Defendants' Exhibit 11, patent 483,014, to Powers, dated September 20, 1892, for improvement in Steam Engine. The pertinency of this patent was not shown. Probably merely relied on as another instance of a bifurcated arm *per se*.

Defendants' Exhibit 12, patent No. 531,861, to Rhodes, dated January 1, 1895, for improvement in Gas Engine. Pertinency is not explained.

Defendants' Exhibit 13, patent No. 559,192, to McNerney, dated April 28, 1896, for Steam Log Loader and Turner. Pertinency not explained.

Defendants' Exhibit 14, patent No. 623,002, to Fitzgerald, dated April 11, 1899, for a Log Canter. Pertinency not explained.

Defendants' Exhibit 15, patent No. 694,459, to Carter, dated March 4, 1902, for Connecting Device, as applied "to a washing machine" (specification, p. 1, line 29). Pertinency not explained, probably relied on merely as another instance of the common use of a forked arm in mechanical structures.

Defendants' Exhibit 16, patent No. 759,857, to Botkowski, dated May 17, 1904, for Valve Mechanism for Engines. Pertinency not explained.

Defendants' Exhibit 17, patent No. 852,231, to Kennedy, dated April 30, 1907, for Log Turner. Pertinency not explained.

Defendants' Exhibit 18, patent No. 875,297, to Stanley, dated December 31, 1907, for Gasoline Engine. Pertinency not explained.

Defendants' Exhibit 19, patent No. 905,721, to Lindberg and Fitzgerald, dated December 1, 1908, for Oscillating Engine. Pertinency not explained.

Defendants' Exhibit 20, patent No. 992,212, to Kratsch, dated May 16, 1911, for Skid Lifting Device.

It will be noted that this Kratsch patent shows bed plates on which the devices comprising the combination for effecting the operation of a push arm and the combination effecting the operation of the hook arm are respectively mounted.

It will further be noted that this Kratsch patent shows the same type of bed-plate as Defendants Interrogatory Exhibit "B" and which is commonly designated as the *crooked bed* type (see Exhibit, Trans. p. 289, also p. 33). Patentee Kratsch refers to said Simonson type on page 1, line 43 of his specification and states that his "invention is illustrated as applied to a loading machine of the type known as the Simonson Log Loader and Turner." This Kratsch patent was issued a year and eight months (May 16, 1911) after the Cleveland patent (September 7, 1909); and besides has no bearing on the issue, being merely cumulative of Defendants' Interrogatory Exhibit "B."

The earlier log turners, for example those shown by the Simonson patents constituting Defendants' Ex-

hibits 5½ to 10, were wholly unfit for the heavy work of the Pacific Coast. They had no bed-plates. "The brackets which carry the shaft directly rest upon the floor * * * and the floor would not be the full equivalent of the bed-plate now in use." That was the statement of Appellees' own expert witness, Thomas. (Trans. p. 76.)

In brief, the defense of appellees may be termed a *synthetic defense*.

Defendants-Appellees being *interrogated* by appellant *as to the bearing* of said bunch of patents, pleaded in the answer, on the combination in issue, answered: (Trans. 13).

1. "Specify as to each of the patents cited in paragraph XIV of the answer herein, the particular mechanical feature or combination of parts described therein, on which the defendants will rely on the trial of this case as instances of prior publication of the patented invention here in suit.

A. "*None of the patents* designated in said interrogatory *are relied upon* to show an exact duplication of the construction shown in the patent in suit, but all show, *collectively*, that prior state of the art upon which said patent was predicated, and show it to anticipate any invention exhibited in the subject matter of Claim 12 of said patent—the sole claim relied upon by plaintiff."

And the appellees "let it go at that"—to use a vernacularism.

The Problem When Cleveland Entered the Field and the New Results Attained by Him

The testimony of Mr. Cleveland, the patentee, was taken by deposition in Dothan, Houston County, Alabama, where he had gone to spend the winter because of ill health. (Trans. 155, 161.)

Mr. Cleveland is a retired manufacturer, sixty-two years of age.

He testified (Ib. 156) :

“I had handled log-handling mechanism over a period of approximately twenty years, prior to April 13, 1909, because of my being engaged in the designing of sawmill machinery. I have eight or ten other inventions relating to log-handling or sawmills mechanism, and I obtained U. S. Patents for all of these inventions. * * *

“Q. Will you state generally the circumstances surrounding the conception and development of the invention defined by this claim twelve.

“A. (By way of Explanation.) Simonson's Log Turning Machines, are known in the art as a particular type of machine, regardless of who the manufacturer is, and in referring to my invention, I use the name of Simonson Turner broadly. Some time after Mr. Simonson secured patents on his turner Nos. 408,760; 448,588; 448,590; 448,593; Mr. Simonson called at Fon du Lac, Wisconsin, and endeavored to arrange with DeGrote Giddings

& Lewis to manufacture his turners. About that time or shortly after, I was employed by the said DeGrote Giddings & Lewis, as sawmill machinery designer, and while the said DeGrote, Giddings & Lewis were not interested and did not care to manufacture the turners for Mr. Simonson, it caused them to think seriously of manufacturing *heavy* sawmill machinery for the Pacific Coast, believing it was a good field for their operation; therefore they discussed from time to time with me the designing of machinery for that purpose. Therefore, when the Simonson's patents were about to expire we gave serious thought to the design of an improved Simonson turner, and this led up to my invention and subsequent patent. * * * I first disclosed the invention defined by said claim 12 to others some time in January, 1907. * * * The first drawing of the invention defined by said claim 12 I made some time in January, 1907. * * * The first log turner embodying said claim 12 was built and shipped to the Albion Lumber Company, Albion, Mendocino County, California, January 20, 1909. This log turner was successfully operated. I cannot remember the number of log turners *subsequently installed*, but there were certainly *quite a few*, among which, one was shipped to Portland Machinery Company, Portland, Oregon, and another to Brace & Hergert Mills Company, Seattle, Washington. The actual construction work began about October 1, 1908, on the turner shipped to Albion Lumber Co. * * * *The object of the invention* defined by said claim 12 was to build a

machine having a stronger arm either for the push arm or hook arm, and the construction shown in my invention was much stronger arm than any other in use at that time.

“All of the turners of which I had knowledge at the time I brought out my invention had straight arms with a single bearing on the shaft. Now, it is a well-known fact that the weakest part of the log loader arm is near the shaft, and not in fact near the top of the arm. It was therefore my intention to construct an arm that was stronger near the shaft, or in my belief the weakest part. This I accomplished by making an arm having *two bearings on the shaft* in place of one, or, *bifurcating* the lower end of the arm. At the time I conceived my invention, in the year 1907, I saw the Simonson's Log Turner constructed by the Challoner Machinery Company of Oshkosh, Wisconsin, and later saw them in actual use in a number of saw mills on the Pacific Coast. These Simonson turners worked successfully in a general way, but in visiting the sawmills on the coast, I was visibly impressed with the *number of broken log loader arms* generally laying around these mills. The *bed-plates as contained in the Simonson machines were all built with an offset*, or, in other words, *the bearing at the end of the bed-plate in which the shaft rotated, was not in a center line with the steam cylinder*, but was to one side of the same. The arms were constructed with a single bearing on the shaft, as shown in Defendant's Interrogatory

Exhibit "B." (See cut Trans. 289.) The number of broken arms I observed around the mills prior to the conception and development of my invention influenced me in constructing the pusher and hook arms with a double-bearing on the shaft, or, in other words bifurcating the shaft end of the arm. The differences between the Simonson bed-plate, and its bearing and the bed-plate, bearing the arm connection, as developed by me and defined in said claim 12 is this: The original Simonson as before stated, has a bed-plate with the shaft bearing offset to one side of the center of the cylinder, whereas, in *my construction the shaft bearing of the bed-plate is in direct line with the center of the cylinder and push-arm, and thereby equalizes the strain. The advantages* I proposed to secure by the changed construction was to get a *stronger and more symmetrical machine*. By making the arm bifurcated and thereby having a more substantial bearing upon the shaft, and a stronger arm, and having the shaft bearing on the end of the bed-plate in direct line with the center of the cylinder, which *construction was better to withstand the thrust of the cylinder*. The primary cause of breaking the arm of the old Simonson turner was because of poor design. The arms were all straight arms, whereas, in my construction the arms to which the piston rods are attached have a double bearing on the shaft, allowing for a more secure attachment to the shaft, *straddling the end of the bed-plate, coming together and forming a single arm from about*

midway to the top of the arm. This construction permitting a more equal distribution of the metal, and thereby making a broad, deep, and strong arm. I also observed that other parts associated with said arms were broken, principally the bed-plates. By my invention I intended to correct this condition by making a so-called "straight line," bed-plate, with practically all strains in a straight line. It is a well-known fact that a bed-plate constructed on a curve, or as I called it a crooked bed-plate, when the strain is applied has a tendency to straighten out, therefore, it is not as strong a construction as a bed-plate built on a straight line principle, as my construction is.

I am in the South at the present time because my physician thought it would be beneficial for me to spend this winter in a warmer climate, my home being in Indiana.

(Cross-Examination by Mr. Atkins, Trans. 161.)

By a designer I mean a man who originates and who details or makes the detail drawings. I attended to that. My activities covered practically all of the United States and Canada. * * *

My object in constructing the subject matter defined in claim 12 of the patent in suit was not only to make a stronger arm, but to arrange the same to be in direct line of the forces exerted on it, and therefore more equally distribute the forces.

* ● *

My improved log turner so far as defined in claim 12 turned the log in the same way as the old Simonson turner, but by a mechanism, which I regard as better. When I made my invention I did not know of any straight bed-plate in the Simonson type of turner, or of a bifurcated hook-arm in that type of turner.

(Witness is shown copy of patent to Simonson, No. 448,592, issued March 17, 1891; Defendant's Ex. 9; Trans. 210.)

A larger sized cut of the arm EE of Fig. 1 of this patent was made by appellant and introduced by appellees as Defendant's Ex. 29. It is of no importance but for convenience is reproduced at p. 9 of Supplement to Transcript of Record.

"I do not find in the drawings of this patent a bifurcated hook-arm. It is not a bifurcated arm in the sense that my design of the hook-arm is, as mentioned in claim 12. *The arm E shown in Figures 1 and 2, of this patent is a bifurcated arm to the extent only, that it has a divided bearing upon the shaft.* The arm E shown in the Simonson patent No. 448,592, illustrates two separate arms, with a distance piece bolted between these two arms. The above-mentioned arms *are perfectly straight, from the shaft upward*, whereas the arm shown in the Cleveland patent in suit, and marked 39, is an integral casting having a *fork lower end* for attaching to the shaft.

“I understand the definition of bifurcate is to divide in two directions. The arm E referred to in the Simonson patent last named as before stated is simply two arms extending in the same direction to the shaft. I claim that my hook-arm is stronger, not only because it is attached to the shaft by two bearings, but also the fact that *these two bearings extend upward and converge into a central arm*, all forming an integral part of the arm. It is not a mere question of the weight of metal. The design has everything to do with the strength or a casting or smiliar parts, for instance a board is much stronger placed on edge or will sustain a greater weight, than if the board is laid flat and the weight applied. Therefore in designing this arm in question I place the member with a greater distance crossways the shaft, and which would be stronger than for instance a square arm containing the same amount of metal. I do not wish to be understood as stating that an arm would be strengthened by cutting out a portion of it at its bearing end to effect a bifurcation. Design has everything to do with the strength of materials. *The mere taking, for instance of a square bar, and slotting one end of it without an equal distribution of the metal, would weaken it as a whole*, and for the purpose intended.

Witness here shown photograph marked Defendant's Deposition Exhibit “B”, and being the identical photograph in the record marked *Defendant's Interrogatory Exhibit “A”*.

“I judge from an inspection of this photograph that it is some sort of an arrangement for pushing logs on the carriage. I do not remember ever having seen a similar outfit in all these details. * * * *I would regard the combination shown in this photograph—referring to Defendant’s Interrogatory Exhibit “A”—as materially different from the subject matter defined in claim 12 in suit, because the bed-plate shown in this photograph has two arms extended out towards the carriage and provided with two bearings for the same, with the arm placed between the bearings, which anyone skilled in the art would readily comprehend is not as strong as that shown in my patent in suit.*

“Q. In your opinion is there any advantage in a bifurcated arm straddling a single bearing on a straight bed-plate, over a bifurcated bed-plate having two bearings upon opposite sides of an intermediate arm, other features of the construction being equal?

“A. I think a bifurcated arm much stronger, because no machine is stronger than its weakest part, and the bed-plate shown in this photograph has two members extending out from the cylinder bearing the ends of which each contain a bearing for the shaft. Now then, there is more chance for defects in the two members than there would be in one. I mean by that, casting defects. Furthermore, if one of the bearings on these members wears more than the other, and it is highly probable that they would

not each wear alike, it would throw the strain on only one member, thereby springing the shaft and probably breaking that arm of the bed-plate. *With a bifurcated arm, and one bearing on a straight line bed-plate*, no matter how much wear or looseness there might be in this bearing, *the strains upon the arm and bed-plate would always be equalized*. I think there would be a probability of strain of the shaft of transversed dimension such as are used in the log turners on the West Coast. I think they can spring anything on the Pacific Coast. It is a big country, and big timber, but even if there should be no springs in this shaft, if one bearing wore more than the other, all of the strain would be thrown upon a single bearing, or a single member of the bed-plate. Any unequal wear upon any one bearing of the plurality of bearings which carry the shaft would occasion longitudinal disalignment of the shaft axis."

Further Evidence of the New and Useful Results Attained by the Cleveland Structure

AUGUST DEMANGEON was called as a witness by plaintiff. He is sixty years of age, is a practical machinist and designer and has devoted many years to the study of saw mill machinery. He is at present engineer for saw mill machinery of the Allis-Chalmers Manufacturing Co., of Milwaukee, Wisconsin, which specializes, among others, in the manufacture of saw mill machinery as applied to the work on the Pacific Coast. (Trans. 136-137.)

Mr. Demangeon's attention to the Cleveland patented log turner was first attracted through an advertisement in the trade papers and catalogs issued by the manufacturers of that log turner (Ib. 138). That was about twelve years ago. (Ib. 142.)

Being questioned as to the advantage of the Cleveland patented structure over the prior devices which he knew, Mr. Demangeon said: (Ib. 138.)

"In my judgment, the Cleveland type accomplishes the object desired in the best possible manner; *that is there is the greatest strength obtained at minimum cost*; the arrangement is such that it *occupies the least possible space*, and *all strains are taken care of in the most direct and simple manner*.

"The Cleveland method permits building of the machine with the *least amount of metal and also giving the maximum strength*. I believe the Cleveland model *can be built at less cost* and will answer the purpose in every possible way." (Ib. 140.)

"*Simplicity in the Cleveland machine, a single bearing in the Cleveland machine* as against two bearings in this Defendant's Exhibit A. (Compare models of arm units shown by Defendant's Ex. 26—representing the Cleveland patented structure—and Defendant's Exhibit 27, representing the Frazier River type, also shown by Defendant's Inter. Ex. A.) Two bearings are entirely unnecessary when the work can be accomplished with one bearing; furthermore the (Cleveland) arm being

bifurcated and having considerable spread and supported each side of the bearing is stronger in my judgment than the type of arm shown in Exhibit 'A'. In other words, *the purpose intended to be accomplished is accomplished in a manner that I consider new and novel.* At the time I first saw the Cleveland design I had never seen a similar combination of arrangement to answer the purpose." (Ib. 141.)

In referring to Plaintiff's Exhibit 19 ((showing a photograph of the modified type of Cleveland patented log turner now installed in the saw mill of Jones Lumber Company at Portland, Oregon, Ib. 80), witness explained that the construction shown in the latter exhibit— (See p. 4, Supplement to Trans.)

"is the same principle as the Cleveland patent construction, but the two sides of the bifurcated arm are spread more than in the Cleveland patent, in order to accommodate the spring cushion floor plates used in connection with the nigger, and in order to be able to locate that floor plate in its proper position. (Ib. 143.)

The function of the so-called "nigger" is to turn the logs.

It is becoming customary on this coast to use "a nigger" in connection with the push-arm of a log turner, for the reason that much smaller logs are being brought to the mills and in consequence it is desirable to have both devices for use at the same time. (Ib. 143, 144.)

P. R. HINES, called on behalf of the plaintiff below, being examined at length as to the function performed by the different parts constituting the Cleveland patented combination, and the results attained by such combination, said:

“The function of a bed-plate is to make the machine self-contained, to give it a broad, firm base; if you get any settling or misalignment of parts you are very liable to get a very serious strain in the machine, so you put in a heavy bed-plate; * * * a slight misalignment will make sometimes a very serious strain in the machine and cause breakage, * * * In a log-turner, naturally with high pressure of steam on, pushing out against a log, there is a heavy strain thrown on the main bed-plate. Now, it is a well known fact that in the old art the crooked bed-plates broke quite frequently under the strain. (Trans. 94.)

Referring to Defendant's Inter. Ex. A and 27, witness said:

“It is possible to design an arm with a broad base and with broad hub, and it would be equally as strong, that anyone would concede who has a thorough understanding of mechanics, but it can be I am certain, demonstrated that the arm would weigh more.” (Ib. 95.)

In designing commercial machines, we keep upmost at all times *not only strength but price*, be-

*cause we have to sell this product, and castings are paid for according to weight, that is hundred-pound castings are generally quoted at a certain price, two hundred pound castings at a certain price, and when you get up to about a thousand pounds * * * we jump from probably a thousand to three thousand, the way the average steel foundry would quote, therefore any pounds of steel we can save and still get the requisite strength enables us to make competitive price, whereby we can go on the market and get business.” (Ib. 96.)*

“Competition in this particular class of work is extremely close; a matter of a hundred dollars one way or the other would probably frequently decide the buy.

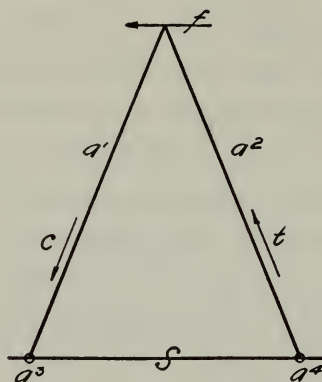
Mr. Hines estimated the difference in cost in favor of the Cleveland patented structure—as compared with the structure shown by Defendant’s Interrogatory Exhibit “A”, and 27—to be \$50.00 for each arm unit, and since there are two units in each log turner it would make a difference of \$100.00 in favor of the Cleveland structure. (Ib. 96, 99, 121.)

This estimated difference in cost in favor of the Cleveland patented structure was not contradicted by appellees.

Mr. Hines compared the bifurcated arm element as contained in the Cleveland patent to that of an A-frame construction referring to Plaintiff’s Ex. 21, which is here reproduced.

Diagrammatic sketch of A-frame principle
as applied to the construction exhibited by the Cleveland
patent. (Hines. Trans. 96, 100, 102.)

PLAINTIFF'S EX. 21



Mr. Hines said: (Ib. 100.)

“In an A-frame, a stress applied in the direction of the arrow *f* would cause a compression in member *a'* and a tension in *a2*. The direction of the compression force and the tension force are indicated by letters on this sketch. The compression is *c* and the tension is *t*. Now, in a structure of this kind, it will be direct compression and direct tension. There will be little, if any, of what we call flexure.”

“Flexure” designates the “tendency to bend the arm by a log that imposes resistance to the onward movement of the arm. In the operation of the machine you always have a log as the ultimate object to be acted upon by the machine.” (Trans. 123.)

“If it were a solid beam, you would get beam action and a flexure which is entirely different from the action of truss compression, and the stresses are much more equally distributed throughout the metal * * * All the metal is employed at its maximum strength, and for the same weight of metal, or for the same force ‘*f*’ *the weight of the metal would not be so great*. In figuring strength, we figure for strength, but in *figuring commercial machines we tend to keep the weight down so much as we can, especially out here on the coast, because we have to pay high freight, and there is no use making a machine any heavier than necessary*. It

only adds to the weight and the expense, both of manufacture and freight. * * *

“An analysis of the Cleveland arm in my opinion shows that the arm is not only strong in the direction of throwing the log, but is also *strong laterally against every possible thrust which it might get through the log moving*, the carriage moving, or being struck by carriage or any of those accidents that are liable to occur in handling a log quickly.” (Ib. 102.)

Mr. Hines in corroborating the statement of Mr. Cleveland, in his deposition, as to *casting defects*, said: (Trans. 104.)

“Q. What difficulties are apt to arise, if any, in casting a mass of steel to some particular shape?

A. Well, in casting steel we must not get a large accumulation of hot metal, as it is something that will cool suddenly at the other end of it so that as it cools off you will get what we call a casting strain. Now, it is highly desirable that this log turner work be done all in steel, and we go as far as we can in the stresses; then we go to a man who knows practically how to cast steel. *The arch in the Cleveland arm appeals to me. You haven't great weight or volume of metal that takes a long time to cool*, but you have a chance for a little expansion there that will not set up a big strain. I refer to the bifurcated portion of the Cleveland structure. * * * You can get a cast strain in metal which is far more

strain than any strain the piece so cast is subjected to in operation.”

“Defendant’s Exhibit 27 would require a larger flask and more careful pouring and gating.” (Ib. 106.)

Another advantage Mr. Hines pointed out in favor of the Cleveland patented structure was:

“Taking into consideration the *spacing of the journal boxes on the bed-plate*, Defendant’s Exhibit 27, there is one thing that I have not mentioned here. While not always necessary, *it is always considered desirable to have the bed-plates alike*. The reason for this is it only *requires one pattern*, one drawing, and consequently *it is much easier to manufacture two things alike than two different*. In this type of bed-plates (Exhibit 27) you must either bring out a long hub on the push-arm, or your hook and push-arm bed-plates will not be the same. The reason for that is that it is necessary to put a clutch on the hook-arm of some kind or other.” (Ib. 107.)

Note in this connection the *bulletin issued by appellee Sumner Iron Works*, designated “Bulletin No. 4”, Defendant’s Ex. 31 (see Supplement of Exhibits to the Trans. of Record, pp. 10-11) compare with Plffs. Ex. 16 showing a cut of Cleveland patented log turner as advertised in *The Timberman* of March, 1912. (Trans. 286) also given at the end of this brief.

Note that in said "Bulletin No. 4," on the fourth page, it is stated by this appellee, as a commendation for its *standard* type of log-turner, identical with the Cleveland patented structure:

"The fact that *both beds are identically the same* and are *either handed* makes it *easier to stock* or obtain *repairs in case of breakage* as *either bed can be used under either cylinder.*"

Summing up the merits of the Cleveland patented combination, Mr. Hines said that while the elements by themselves to a large extent are old—

"it is very easy now to say well it is nicely combined and nicely gotten up. I don't know myself that if I were designing that, that I would arrive at it, but now that it is finished I can say, yes it is a nice combination of *well placed metal*; it shows a *clear understanding of the actual thrusts and strains that a log turner is subjected to*, * * * in every way from a manufacturing standpoint and from a mechanical or engineering standpoint. If you take the thing as a whole, it certainly *fills exactly what you wish to do* with machine of this kind and *at a minnum of weight and material*. The *elements making up the device all mutually support each other*. The best way I can say is like a three-leg stool against a simple two-leg mechanism, which laterally is not stiff; this is supported in all directions." (Trans. 108, 109.)

Mr. Hines further said:

“My testimony in regard to the operation of these machines and the objections which I have mentioned is based on examination of the machines themselves, examination of the operator, and actual observation of the machines themselves in actual service, and not only the observation of Mr. Cleveland’s machine, but there are a great many log turners installed on this river of the old type—Simonson crooked bed type. A new machine doesn’t develop its weaknesses the first year. We find that it is only after years of service; the reason we pay particular attention to machines in operation is that, as the machines are operated over a period they commence to develop their weakness. These things we don’t get in design; and the best way to get what we call the bugs out of a machine is to see the old machine; they have been through what we call the mill; they have been through this hard service of handling the logs. * * * it is only by correcting these faults that we get a perfected machine.” (Ib. 111, 112.)

On cross-examination by Appellee’s attorney—the suggestion being made that the Cleveland patented improvement involved no inventive effort—Mr. Hines said:

“It is very easy to sit here, and says, well, we would do so and so; after a thing is accomplished it is very easy to say what you would do, but before it is accomplished or before perfected it is very difficult to say what you would do.” (Ib. 116.)

MR. D. P. HANSON, who has had years of experience in selling and installing saw mill machinery, said with regard to the Cleveland structure (Trans. 134) that if having to make an installation of a log turner and given the choice he would

“unqualifiedly take that machine, Defendant’s 26, (which is Defendant’s model of the Cleveland patented combination) for two particular reasons: The bifurcated arm, spoken of here, to my notion gives a better strength, and then the whole thing looks more symmetrical, neater, *more mechanically constructed*, according to my way of looking at it.”

JOHN F. MARLER, a witness called by plaintiff in the court below, head sawyer at the mill of Jones Lumber Company, Portland, Oregon, (Trans. 81) said that the saw mill used the Cleveland log turner of the type shown by Plaintiff’s Ex. 19. (A photo print of this is inserted in the Supplement of Exhibits to the Trans. of Record). He testified that it was *necessary to make the arms of the log turner strong* because they are *subjected to side thrust by the log at any time, especially since the carriage is not always brought to rest before the sawyer reaches for the log.*

“As a rule I reach for the log before I stop the carriage; when the carriage is about six feet from the stopping point I start after the log. By the time the carriage is stopped—in medium size or smaller logs—I aim to hit the log with the pick of the hook-arm by the time the carriage stops. Very

often I take the log off the carriage before it stops." (Ib. 82.)

The reason for reaching for the log before the carriage is brought to rest is:

"To make all the time possible, as time is very precious at the head rig. The entire payroll depends upon the head sawyer of the concern. This in some places runs fifty-six cents a minute, possibly, other places maybe it runs as high as a dollar a half minute, and all the time the head sawyer can save for his company means that much. And if you waited so that each device would be absolutely at rest before you moved the other device, you would be slowing down, you are lessening your output." (Ib. 84.)

Mr. Hines also referring to the strains imposed upon the arms of the log turner:

*"The strain may be any way * * * probably the average log scales five thousand feet and the weight of the green log is about six pounds per foot, board measure. In other words, we are dealing with a five thousand foot log weighing six pounds to the foot which would be thirty thousand pounds or fifteen tons; we often handle double that amount. Now, the question of side strains there are not only side strains but glancing strains of any kind, of a knot or burl, with fifteen tons which may be concentrated on this thing; we naturally have to consider other stresses than the pure weight of the log on the arm."* (Trans. 115, 116.)

Mr. Marler also called attention to the strains imposed on the arms of the log-turner. '(Ib. 83.)

Mr. Marler also explained in his way the inherent strength of the Cleveland patented construction:

"Supposing you were standing with your feet together like that, and would stand perfectly stationary, just like a statue, would it be easier to push you over standing in that position than it would if standing in this position." (Meaning with feet spread apart.) (Trans. 89.)

Mr. Marler on being cross-examined as to whether Defendant's Interrogatory Exhibit "A", and 27 did not show a device equal in all respects to the Cleveland patented improvement, said:

"If I were installing a mill, and had my choice of the structure shown in this Exhibit "A" of the Interrogatories, and a structure as is shown in the model of the Cleveland patent, I would choose the Cleveland patent on account of the forked arm, with respect to the strength of the arm." (Trans. 84.)

* * * "I would prefer the *forked arm and the single bearing*, because your shaft has a number of bearings along on it which support the shaft, and this (referring to the Cleveland arm) is the only bearing your main arm has, and it is better for it to have two bearings than to only have one, in my estimation." (Ib. 89.)

Mr. Hines in pointing out the advantage in the Cleveland structure over the structure shown by Defendant's Interrogatory Exhibit "A" and 27, said:

"The bed-plate shown as Defendant's Exhibit 27 (also Defendant's Interrogatory Exhibit "A") can be constructed to do just exactly what the bed-plate shown in the Cleveland model does, but in doing it, in the first place, when you shove the arms up against the log you have a stress in the bed-plate you would have a compression lengthwise of the bed-plate. * * *

Then, speaking of casting defects, added:

"There would be a difference in regard to casting defects which might arise in a bed-plate such as illustrated in the Cleveland model, and the bed-plate as illustrated in Defendant's Exhibit 'A' of the interrogatories; that is the same as Exhibit 27. There is always conceded the possibility of casting defects in cast steel, and bed-plates are generally made of cast steel. Naturally the larger the casting and the more intricate the casting, and the more it departs from a simple structure in cast steel * * * the more possibility there is for warpage, and for casting strains of all kinds, and also blow-outs, but in general in casting steel you have to keep your lines as simple and the distribution of metal as simple as you can, because it is very difficult to cast." (Trans. 97.)

Referring to the two bearings like that provided in the bed-plate shown by Defendant's Interrogatory Exhibit "A", and 27, Mr. Hines said:

"The setting work required of mechanics, and *line-up for the two bearings* to be bored separately, even where they bore right straight through—I am doing estimating continually on parts and on all sorts of different work in connection with machinery, and I have accurate costs and am furnished accurate costs up to date constantly on all classes of work, and I can say without hesitation that *double boring would cost more.*" (Ib. 98.)

It was in connection with the latter statement that Mr. Hines said, as already mentioned, that *the cost of construction in favor of the Cleveland structure*, as compared with Defendant's Interrogatory Exhibit "A", would be \$50.00 for each arm unit. Thus *about \$100.00* for the complete turner. (Ib. 99, 121.)

The Reason Why Appellee Sumner Iron Works Infringed

MR. SUMNER, vice-president and general manager of Appellee Sumner Iron Works, referring to the log turner furnished by his company to Appellee Silverton Lumber Company, testified:

(Trans. 32) "I am very familiar with the log turner furnished to the Silverton Lumber Company in this case. * * * I am acquainted with the circumstances under which the machine refer-

red to was built. Prior to 1913 or '14 we had been building log turners with a *crooked bed*, and I think it was *in 1913 that we suffered a loss by fire; our complete plant was burned*, patterns and everything else; *from that time on, we changed quite a good many of our designs* because we had to make new patterns for the whole line and possibly *profit-
ing by the experience* that we had had, * * * I might say we are quite fortunately situated by being in a sawmill town like Everett for the reason that we can watch all of the different machines, as it were, that we built, in operation. A great many times catching some things that were mistakes, and seeing that they were remedied when the next ones were built. The old turner, * * * termed the Simonson turner, * * * had *more or less trouble with the crooked bed*. In fact, I think they had more breakages with the crooked bed than they had with the arms * * * (Ib. 34). Now, I had never seen anything of the turners as built by Geddings and Lewis at the time we were making our changes. (The party here referred to is DeGrote Giddings & Lewis of Fon du Lac, Wisconsin, referred to in deposition of patentee Cleveland, (P. 157), and by Sumner (P. 39), as the parties who acquired the Cleveland patent and notified appellee Sumner Iron Works that it was infringing). "*I had seen some of their printed matter*, but the straight bed came to my mind for the reason that—I think it was in 1906—I was up to the Frazer (River) mill figuring on a job. They were going to re-

build that whole mill, and the old turner, I don't want this word Simonson to apply to that particular machine, but that type of machine; there was one of those old turners taken out of that old mill, and afterwards sold and went up to the Port Moody Mills; that was back in 1906 or '07; that had the straight bed; the beds had never broken. * * * *That very same turner* * * * *improved the old Simonson crooked bed; but* * * * *transferred that weak point to the arm; the point that is weakest in the whole machine.* * * *

Q. (Ib. 36) * * * You have said that you did *not* know the Cleveland machine at the time you adopted the design?

A. No, *I wouldn't want to say that*; I never had seen one of their turners, but I presume I had seen some of their literature. I wouldn't say that I hadn't, or I wouldn't say that I had, because that is taking too much from memory, * * * But, as far as the turners with the straight bed is concerned, the one I saw up there years ago was fresh in my mind when we were considering the redesigning of the turner after our fire, and our patterns had all been burned.

Q. When did you first become acquainted with the Cleveland patent in suit?

A. Why, I think that after we had the drawings made of the turners—and *we must have seen*

the advertisement of the Cleveland machine—we sent the whole thing on to Siggers & Company in Washington who had been our patent attorneys for a good many years, to have a search made to see if there was an infringement.”

A full page of the so-called Simonson Log Turner as improved by Cleveland’s patent was published in the March, 1912, issue of “The Timberman” on Page 85. See plaintiff’s Exhibit 16, Trans. 286; also end of this brief.

The cut in said advertisement, as will be noted, clearly shows the patented Cleveland combination.

(Said attorneys’ report is dated August 20, 1920, being tendered in evidence and marked for identification, Defts. Ex. 21; the court ruling that “it is not competent evidence.” Trans. 37.)

But appellee had had another report from the same attorneys “long prior to this report” (Ib. 38).

Mr. Sumner being questioned how they arrived at the infringing construction made by his company, said:

“Q. In arriving at the construction of the log turner as you built it, and which is claimed to infringe the Cleveland patent, did you, or did you not, copy the Cleveland design?

A. Well, it is very similar to the Cleveland design; very similar for the reason that the design in the construction was old; we had been building it for years.

COURT—What counsel wants to know is, whether you had before you at the time you manufactured, the Cleveland design and copied it?

A. No, we didn't; didn't have it.

Q. *The knowledge of the Cleveland patent, then came to you after you had designed your machine?*

A. No. *I wouldn't say that; I wouldn't say that.* As I say, we might have seen some of their printed matter, but I never had seen one of their machines." (Ib. 40).

Sumner being shown the photograph identified as Defendants' Interrogatory Exhibit "A", and asked to compare the same with the model of the Cleveland machine, Plaintiff's Exhibit "10", (Trans. 285), said:

"The *only similarity* would be the straight bed that is, the straight bed here and this straight bed there. This (that is said Ex. A of Defts.) has two bearings in the bed, and that (the model Plffs. Ex. 10) has one. * * * This (said Defts. Ex. A) shows a straight bed-plate with two bearings instead of one, and a *trifle wider on the shaft end* than on the cylinder end, but running nearly parallel the two sides." (Trans. 41, 42).

Witness further stated:

"the upper end of the arm, either hook or push arm, would want to be direct in line with the center of

the cylinder, so as the piston rod would move back and forth there wouldn't be any cramping or bending of the piston rod." (Ib. 45).

Note that the cut of log turner manufactured by Sumner Iron Works as shown by their advertisement which appeared in "The Timberman" of August, 1920, on the inside page of the cover (See upper illustration reproduction of this advertisement Trans. p. 287) shows *all the elements constituting the patent combination*. The only difference between the bifurcated arms as made by Sumner Iron Works and previously shown in the advertisement of "The Timberman", Plaintiff's Exhibit 16, (Trans. 286) being a mere matter of degree. That is to say the curve in the shoulders of the bifurcate portion of the arms was made less abrupt as Sumner said. (Trans. 56).

"We have been gradually taking this crook out and bringing this up straighter here, to do away with breaking.

Q. That would be a forked arm, would it not?

A. *The bottom part has not been changed*, the part that is on the shaft, that is, in repairing the old-timers."

Slightly modifying the curve in the shoulders of the bifurcated arm as used in the Cleveland combination was apparently all the needed correction Mr. Sumner or his designers could find. He testified (Trans. 46) that if the sides of a forked arm would come up a little straighter it would be very strong.

Repeating his words:

“Q. *What would be the effect on the strength of the push-arm by bifurcating it at the end which is connected to the shaft?*

A. If this line here had been straight on each side for the same amount of metal, *it would develop greater strength.* We have found out, in the last two or three years’ experience here is where we are having breakages.”

Sumner could not remember when the Silverton log turner was put in. (Ib. 63).

When asked whether he knew the principle of construction of the Cleveland patent when that log turner was built, he declined to answer:

“Q. When you built that Silverton log turner you had already seen advertising matter of the Cleveland patent here in suit?

A. I testified that I presumed I had seen the printed matter.

Q. And you knew the principles of construction there involved, didn’t you?

A. *I wouldn’t answer that. I wouldn’t say whether I had or not.*

Q. You knew that it consisted of a straight bed, it had a straight bed; but you know the Cleveland patent had a straight bed?

A. I have answered that before. I said that I presumed that I had seen some of their printed matter, but I never had seen the Cleveland turner.

Q. Did the printed matter show that it had a straight bed?

A. Why, you have some of their printed matter. That would tell you whether it showed.

Q. Mr. Sumner, I am talking about the printed matter which you saw of the Cleveland patent.

A. I couldn't tell you all that, for the reason you are asking me to say things on the stand that happened back years ago. Now I told you I presume I had seen—

COURT—If you don't remember, say so.

A. I don't remember.” (Ib. 64).

With regard to *the new drawings* made by the Sumner Iron Works, directly *after* the fire of 1913, Mr. Sumner said: (Ib. 68).

“ * * * These drawings *differed* from the drawings we previously had *in the shape of the bed*, and I presume *in the shape of the arm*. The old set of drawings showed the patterns which had been destroyed, they had a crooked bed. The new drawings had a straight bed. *The log turner turned out from the new drawings made after the fire had a straight bed and a structure very similar to that shown in Mr. Cleveland's patent here.*”

As late as the summer of 1923, thus more than a year after this suit had been brought, which was March 29, 1922, (Trans. p. 2), appellee Sumner Iron Works sold a log turner embodying the structure defined by claim 12 of the patent in suit to the Columbia River Paper Company at Vancouver, Washington. (Trans. 57). Photographs of the push-arm unit and the hook-arm unit of such log turner are shown by Plaintiff's Exhibits 14 and 15. '(See reproduction Supplement to Trans. pp. 2 and 3.)

Sumner explained to the Court (Trans. 57, 58) that they showed "bed-plate with one bearing and the push arm bifurcated."

The Vancouver contract did not require this particular type of log turner (Trans. 60), but appellee *Sumner Iron Works* furnished it because it believed it to be the best there is in the line of log turners. In other words, as Mr. Sumner said on cross-examination:

"Q. In furnishing this particular log turner for Vancouver, Washington, you *intended to give them the very best that you knew of*, as far as log turning outfit was concerned?

A. I presume that would be the argument of one of our salesmen." (Ib. 61).

The improvements suggested by Mr. Sumner with regard to reducing the curves at the shoulders of the bifurcated portion of the arm, (Trans. 56) is, it is submitted, merely a matter of choice and degree.

The Cleveland patented log turner as manufactured by Allis-Chalmers, a licensee of appellant, (Trans. 128) has very little curve at the shoulders of the arms as shown by Plaintiff's Exhibit 19, (Referred to in Trans. P. 81, 88, 129, and 143) and reproduced in Supplement to Trans. p. 4.)

This cut shows the unit of each of the arms as composed of the combination covered by claim 12, but the devices are mounted for exhibition purpose only.

The type of Cleveland patented log turner shown by Plaintiff's Exhibit 19 is that installed at the saw mill of Jones Lumber Company at Portland, Oregon. (Trans. 80, 81). In this log turner the bearing is provided at the end of the bedplate for the shaft, and the arm straddles the bearing the same as described in claim 12; but the push arm (A) is divided so that a "Hill Nigger" may be inserted up through the bearing. A Hill Nigger is a bar with teeth on it, and is used as a substitute for the arm to turn smaller sized logs on the carriage (p. 88). See testimony of witnesses Marler and Hines Trans. 129.

As explained by witness Demangeon (Trans. 143):

"It is becoming quite necessary in this country to use a Nigger in connection with the so-called Simonson-type log turner, for the reason that much smaller logs are being brought to the mills to be sawn than formerly; it is becoming desirable to have both machines for use at any time."—that is to say to use the push arm or the Hill Nigger as expedient.

The modification illustrated by said Plff.'s Ex. 19, which can so be made in the Cleveland push arm, is not material to the case at bar; but it shows that the particular combination covered by Claim 12 is adapted to allow for the incorporation in the Cleveland push arm unit of a so-called "Hill Nigger" or auxiliary device for turning smaller sized logs.

From Defendants' Exhibit 31 it is to be noted that appellee Sumner Iron Works adopted the Cleveland patented combination for its "*Standard straight-bed log turner*".

This exhibit is an advertising bulletin issued by appellee Sumner Iron Works and designated "Bulletin No. 4".

On the outer page of this bulletin appears a cut apparently identical with that shown by Plaintiff's Exhibit 17, (Trans. 287) thus showing a device which clearly infringes claim 12 of the Cleveland patent.

On the fourth page of this bulletin appears a cut of another log turner manufactured by appellee Sumner Iron Works which in this instance is arranged in a similar manner as the illustration of the Cleveland log turner on Page 85 of "The Timberman" of March, 1912, in the advertisement of Giddings & Lewis Manufacturing Company, who in 1912 were manufacturing the Cleveland log turner. See Plaintiff's Exhibit 16, Trans. 286, also at the end of this brief.

Reproduction of Page 85 of The Timberman
of March, 1912

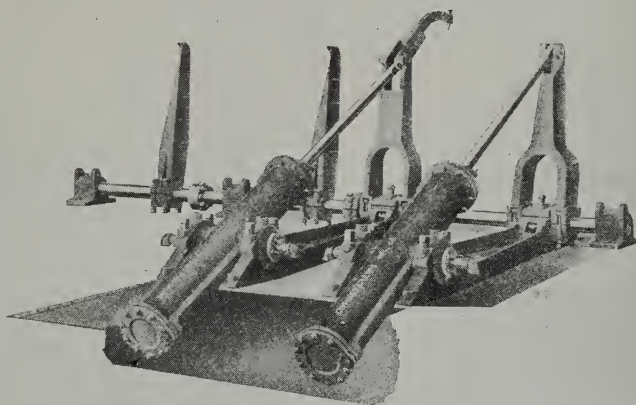
PLAINTIFF'S EXHIBIT 16

MARCH, 1912

THE TIMBERMAN

85

<p>HAZARD WIRE ROPE FOR EVERY PURPOSE</p> <p>HAZARD MANUFACTURING COMPANY WILKES-BARRE, PENNA. NEW YORK, 50 DELY ST. PITTSBURGH, 21 CONESTOGA BUILDING. CHICAGO, 552-554 WEST ADAMS ST.</p>	<p>HAZARD SPECIAL PLOUGH STEEL WIRE ROPE "OLYMPIC BRAND" FOR LOGGING PURPOSES</p>
<p>MARSHALL-WELLS HARDWARE CO., Portland, Ore., Seattle, Wash., Spokane, Wash., Agents</p>	



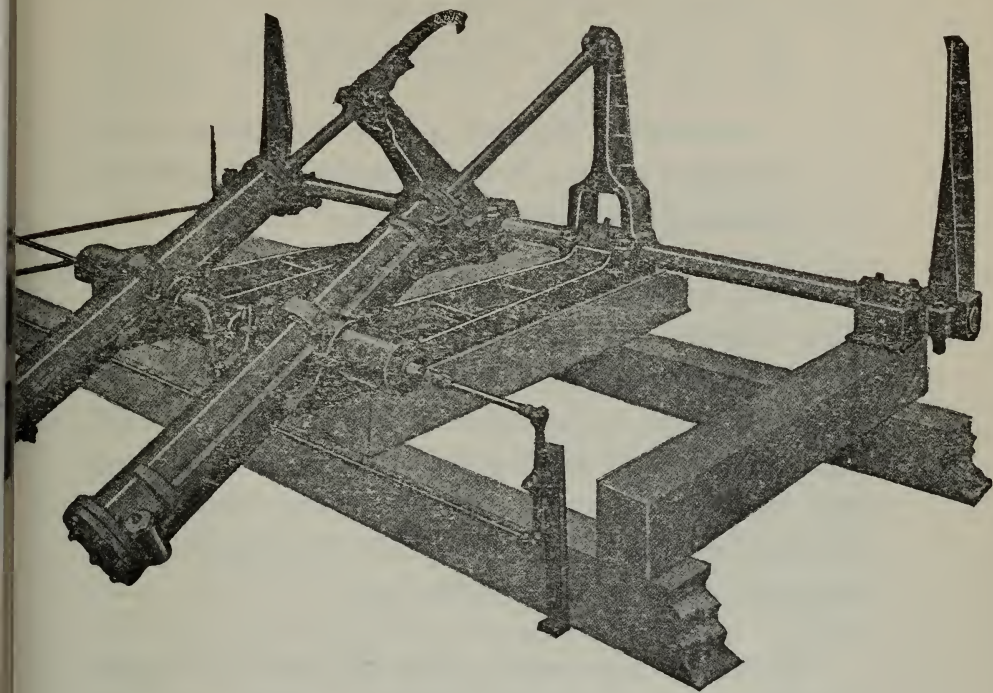
CLEVELAND'S IMPROVED
SIMONSON LOG TURNER
WITH INDEPENDENT STEAM SKID LIFT

No leaky trunnions, because valves are placed below the floor timbers.—Note the straight steel bed plates and forked hook and push arms.
If you are going to put in a Turner, better get the best and latest improved.

GIDDINGS & LEWIS MFG. CO.

FOND DU LAC, WISCONSIN

Reproduction of the cut shown on the fourth page of *Sumner Iron Works Bulletin No. 4*, constituting Defendants' Exhibit 31. (Trans. 153.)



"Sumner Standard Straight-Bed Log Turner".

The cut shown on the fourth page of said bulletin, Defendants' Exhibit 31, reproduced at p. 10 of Supplement to Transcript.

In the description under the last mentioned cut of this log-turner appears the following:

"BEDS. As the foundation of this machine, which we consider one of the most essential features, we have *adopted the straight line style of bed which we consider best in principle*, in practice and from an engineers' standpoint. This construction eliminates any tendency to produce twist-

ing strains on shaft or bearings which occur on the offset type of beds. The fact that *both beds are identically the same and are either handed* makes it easier to stock or obtain repairs in case of breakage, as *either bed can be used under either cylinder*.

“ARMS. The push and hook arms are made of electric cast steel and *designed to straddle the main shaft bearings on beds*.”

Thus, in short, it is submitted the record shows: That appellee Sumner Iron Works manufactured log turners embodying the Cleveland patented combination—*adopted* such construction as THE STANDARD construction of its log turners—because it considered that its salesmen could truly say of such construction *it is the best this appellee knew of*, as admitted by Mr. Sumner on the stand. (Trans. 61).

But the record further shows that only by copying said Cleveland patented structure, appellee Sumner Iron Works was put in position to compete with appellant and its licensees in the selling price of these log turners.

It is apparent from the record that appellees pinned their defense—of the prior art suggesting the Cleveland structure—on two devices:

FIRST: The *straight bed* idea which is exhibited by the photograph, Defendants' Interrogatory Exhibit "A" representing the push arm unit of the log turner seen by Mr. Sumner in 1906, in the Frazier River Mill,

in Canada, and also illustrated by the model constituting Defts'. Ex. 27.

SECOND: The *forked-arm* idea as shown for example in the Simonson patents No. 448,591 and No. 448,592, constituting Defts'. Exs. 8 and 9, which exhibits were introduced principally with regard to the construction of the hook arm E. An enlarged drawing of this arm was made by Plaintiff and such drawing was accepted and introduced by defendants as their Exhibit 29.

With regard to said first alleged device:

Mr. Sumner testified that this exhibit of defendants' differs from the old crooked type of bed plate in being made straight with two bearings for the shaft, and an arm—which arm for convenience is being designated a "T" arm—on the shaft between the bearings. (Trans. 44).

Mr. HINES said:

The T-arm would have to be made *heavier*. (Ib. 103). There would be *more of a chance for casting defects* as compared with the bed-plate of the Cleveland patented combination. (Ib. 97).

The latter was also confirmed by patentee Cleveland. (Ib. 165).

Mr. Hines further said that the structure represented by Defendants' Exhibit 27 *would cost more to*

make. (Ib. 98). It would require a larger flask for casting, and require more careful pouring and gating. (Ib. 106).

None of these differences in construction, in favor of the Cleveland patented device, were contradicted by appellees.

Mr. Hines also called particular attention to the fact that *the bed-plates for the push arm unit and the hook arm unit would not be alike.* (Ib. 107).

On the other hand *by the Cleveland patented structure said arm-units are alike, and may be used in, or substituted for either unit.*

Appellee Sumner Iron Works *extolled this particular feature and adopted it for its standard type of log turner as shown by Defendants' Exhibit 31, Trans. 153, and the cut thereof in Supplement to Trans. p. 10.*

Considering next appellees contention on *the bifurcated-arm idea:*

It will be noted that *the question was not whether a bifurcated arm cast in one piece was the equivalent of such an arm made up of several pieces; but whether the prior devices expressed the same idea and purpose as the Cleveland combination.*

MR. THOMAS, appellees' witness said:

That the arm E shown in the Simonson patents last referred to was in effect just the same as if an integral

casting; but added, while said arm E is mounted on the shaft of the log turner, the *devices of these Simonson patents do not include any bed-plate. The shaft is carried by brackets* mounted on the floor, and that is not the same as using a bed plate. (Trans. 75, 76).

MR. HINES said, referring to said arm E of said Simonson patents—"This arm is made double to provide a pocket for the hook F, but the push arm shown in this patent No. 448,592 (Defendants' Exhibit 9) *goes back again to a single arm with no bifurcations, lateral bracing or anything of that kind.*" (Trans. 107) and having reference to the drawing made by plaintiff of this arm E (Defendants' Exhibit 29) Mr. Hines said:

"I would *not* consider that construction as efficient as the Cleveland bifurcated arm, because *the Cleveland arm straddles the bearing.* There is a great deal of *mutual support*, and there is *a great deal more strength in the Cleveland arm*, for lateral strength, and I think lateral strength myself is important in this work, from my own observation." (Trans. 108).

MR. HANSON, called by plaintiff, said:

"That Defendants' Exhibit 27 as amplified by Defendants' Exhibit 28, 'would be a *clumsy affair all spread out*, not symetrical'. He would redesign the push arm of the last mentioned Exhibits Exhibit 22. (Trans. 135, and see cut Supplement to Trans. p. 5.)

MR. DEMANGEON on behalf of appellant, said:

“The arm marked E, * * * is two arms instead of one arm joined together by a spacing piece by means of bolts or rivets I judge by the picture, and *is an entirely different appliance.*”

MR. CLEVELAND pointed out that the Arm E of said Simonson patents is “*perfectly straight, from the shaft upward*, whereas, the arm shown in the Cleveland patent in suit, and marked 39, is an integral casting, having *a fork lower end for attaching to the shaft.*” (Trans. 163).

The file wrapper of the Cleveland patent is unimportant and therefore was not reproduced as an Exhibit.

It cites no references. The combination in issue is conceded by appellees to be original with Cleveland. Appellees’ defense is that the combination of the elements stated by said claim 12 did not involve invention; therefore anyone had a right to appropriate that combination.

Judge Bean held said claim 12 invalid.

He said—“the use of a push arm in a log turning device, bifurcated and straddling the bearing formed upon the outer end of the bed plate is not sufficient in my opinion, in view of the prior art, to constitute invention and subject to patent.”

The Court stated in support of its finding that some sort of bifurcated arm is shown by EE in said Simon-

son patents constituting Defendants' Exhibits 8 and 9. Therefore, the Court thought, it "did not involve invention * * * for Cleveland to use an arm divided or forked at the lower end."

The Court cited in support of its position the case of Gilchrist vs. Mallory; (381 Fed. 350), but this case merely states the well established rule that ordinarily it does not involve invention to cast in one piece what formerly was made up of several pieces fastened together. That fact was, however, wholly immaterial.

But it is to be noted, in this connection, that—as explained by Mr. Thomas—appellees' expert witness (Trans. 75, 77)—the construction of the arms E E shown in said Simonson patents is wholly different from the arm comprised in the combination in issue. Those patents showed no bed plate at all. While in Claim 12 *a bed plate*—and besides one of *specific* construction, is *an element* of the combination, and the Cleveland arm was especially adapted to cooperate with his bed-plate. The construction so produced was *new* as Mr. Sumner himself conceded. (Trans. 41); and after the fire Mr. Sumner's company made new drawings and new patterns for "*a structure very similar to that shown in Mr. Cleveland's patent here.*" (Trans. 68)—in fact, *identical* therewith.

The question therefore arose: *Is the association of several devices, into one operative whole, invention:*

When the prior art does not show any similar combination having the same purpose and producing the same beneficial results:

When the infringer deliberately adopted this combination with *knowledge* of a patent having been granted for it; discarding by choice other devices which were open to his use:

When the infringer himself *extolled* the virtue of this combination in the circulars issued to the trade, calling attention to the very features which he *copied* from the infringed patent.

Thereupon a decree was entered by appellees in said District Court adjudging said claim 12 of said Cleveland patent void, and dismissing the bill of complaint herein. (Trans. 168).

Thereupon appellant took and perfected its appeal to this court in due form (Trans. 168, 173), asserting in its assignment of errors that said decree is "erroneous and unjust":—

I.

"Because the District Court adjudged and decreed that the improvement described and claimed in claim twelve in the letters patent of the United States granted to Charles E. Cleveland, September 7, 1909, No. 933,231, for an improvement in Log Handling Mechanism, assigned to plaintiff and sued on herein, did not involve invention and that said claim is void.

II.

"Because the District Court failed and refused to adjudge and decree that said Charles E. Cleve-

land invented a new, useful and patentable improvement in Log Turning Mechanism duly defined and claimed in said twelfth claim of said letters patent.

III.

“Because the District Court erred in not adjudging and decreeing that said claim of said letters patent is valid, that the defendant infringed the same, and that the plaintiff as the assignee of said letters patent is entitled to relief from such infringement as prayed for in the bill herein.

IV.

“Because the said decree of the District Court is in prejudice of the substantial rights and equities of the plaintiff in the premises.”

Argument and Points of Law

Appellee Silverton Lumber Company is a mere spectator, as it were. It took no active part in the controversy beyond setting up the same defense as pleaded by Appellee Sumner Iron Works, and undoubtedly at the latter's request.

In order to keep conveniently before the Court an outline of the alleged anticipating devices and the problem which Cleveland had to solve when he entered the field, appellant has placed at the end of this brief a diagram illustrating, by comparison, the differences between the Cleveland patented log-turner described by

Claim 12, and the devices which appellees contend suggested the invention.

Identity between log turner appellee manufactured and the patented structure is admitted. (Trans. 14.)

The alleged anticipation of the patented combination appellee sought to establish by synthesis.

The combination in issue resulted not from a mere selection and assembly of old parts.

Neither Cleveland's bed plate, tapered towards the front end, and provided there with a single bearing, nor the bifurcated arms mounted thereon as described in said Claim 12 existed prior to the Cleveland invention but had to be created by him for the special purpose he had in mind.

The old so-called Simonson crooked-bed log turner had been found wholly unsatisfactory. It did not stand up under the heavy work of the Pacific Coast.

Sumner saw in 1906 the so-called Frazer River straight-bed type of log-turner represented by Defendants' Int. Ex. A and the model thereof, Defendants' Ex. 27. But that did not prove satisfactory. (Trans. 44.)

The fire occurred in appellee's shop seven years later, in 1913.

Appellee had the same opportunity for observation and experiment as Cleveland had. Indeed, more so, because as Sumner said (Trans. 32) *his company was*

fortunately situated for observation. Nevertheless, Appellee did not claim to have produced any improvement on the old Simonson type of log turner during the seven years between 1906 and 1913. When the fire gave the opportunity for changing from the old Simonson type to a better log turner, Sumner's company adopted a construction identical with the Cleveland patented log turner. Sumner had seen advertisements of this. (Trans. 40, 64.) Note the advertisement (Trans. 286) in *The Timberman* of March, 1912, a year before the fire. Sumner's company was a subscriber to *The Timberman*. (Trans. 70.)

It is submitted the Cleveland improvement must have been something not obvious, although needed to make the old log turner a success.

To design and test out by experimentation conceived improvements, in order to demonstrate their utility, requires enterprise and expenditure of money. Cleveland had that burden imposed upon him. Would it not be unjust to Cleveland, he having assumed such burden, now to let a rival manufacturer take the fruits of his enterprise from him?

That the Cleveland improvement is a success is confirmed by appellee's own acts. Appellee not only adopted the Cleveland structure but made that its "STANDARD straight-bed log turner" as shown by Defendants' Exhibit 31, being its "Bulletin No. 4" or circular issued to the trade. (Trans. 123; see reproduction Supplement to Trans. p. 8.)

Sumner's company further confirmed its choice of the Cleveland improvement in The Timberman of August, 1921, which was a device identical with the Cleveland patented combination. (See Plaintiff's Ex. 17, Trans. 71 and 287.)

Sumner's company again confirmed its choice when in 1923—after this suit had been instituted—it installed an infringing log turner at Vancouver, Washington, which, according to Mr. Sumner's admission, probably was *represented by appellee's salesmen to be the best to be had.* (Trans. 61.)

Sumner's company had made no improvements in its "STANDARD" Cleveland type of log turner to the date of the trial. Its changes were merely to straighten out curves in the shoulders in the bifurcations of the arms; changes merely of degree, the work of mechanics of the shop, in no wise affecting the principle involved in the Cleveland structure.

THE BENEFITS OBTAINED BY THE CLEVELAND STRUCTURE WERE:

A small bed-plate tapering towards the front end, well designed for casting, therefore, involving less chance of imperfect casting, requiring less metal and less machine work. The tapering front end of the bed plate was provided with a single bearing, and *this bed-plate answers for both arm units.*

“It is always considered desirable to have the bed plates alike, * * * it is much easier to manufacture two things alike than two different.”

(Mr. Hines: Trans. 107.)

In the so-called Frazer River device, Defendants' Int. Ex. A and Ex. 27, the bed-plates were not the same, but there was one bed-plate for the push-arm unit and another for the hook-arm unit. (Trans. 107.)

Sumner's company in its said Bulletin No. 4, Defendants' Ex. 31, emphasized the features of the Cleveland patented improvement. It said on the fourth and fifth pages of said bulletin, as already mentioned:

“BEDS. * * * *The fact that both beds are identically the same and are either handed makes it easier to stock or obtain repairs in case of breakage as either bed can be used under either cylinder.*
* * * * *

“ARMS. The push and hook arms are * * * *and designed to straddle the main shaft bearing on the beds.* * * *”

The Cleveland patented improvement effected a saving of about \$50.00 per arm unit, thus \$100.00 per log turner, which in itself was sufficient to throw the scale on competitive bids. (Trans. 96, 99.) This fact was not denied by Sumner.

The virtues and advantages of the Cleveland structure are summed up by Mr. Hines:

“It certainly fills exactly what you wish to do with a machine of this kind and at a minimum of weight and material. *The elements making up the device all mutually support each other.*”

(Trans. 109.)

And by Mr. Demangeon:

“The purpose intended to be accomplished is accomplished in a simple, inexpensive and thoroughly satisfactory manner by the Cleveland design, and accomplished in a manner that I consider new and novel.” (Ib. 141.)

“In my judgment the Cleveland type accomplishes the object desired in the best possible manner, that is, there is *the greatest strength obtained at minimum cost*; the arrangement is such that it occupies the least possible space, and *all strains are taken care of* in the most direct and simple manner; any other method known at the present time would cost more to manufacture.” (Ib. 138.)

Sumner's company even knowingly risked threatened law suit, when it adopted and continued to manufacture the Cleveland patented improvement. (Trans. 39.)

Appellee defends its action by contending that said improvements did not require invention, which is an assertion that they were obvious to any skilled mechanic.

If so, why were said greatly needed improvements not made before Cleveland conceived and made them?

Why were they not gotten up in the shop of Sumner Iron Works?

A careful analysis of Sumner's testimony shows a man, of ample practical knowledge and experience with ample facilities for experiment at his command, yet unable to make a log turner by himself or associated talent as acceptable as the Cleveland patented device.

WHAT CONSTITUTES INVENTION.

As aptly stated by the Court in *McMillin Company vs. Androscogging Pulp Company* (291 Fed. 134, 137):

“Courts have not found it an easy task to decide questions of patentable novelty.”

And the Court pointed out the difficulty of determining when a case is within the reasoning of *Loom Company vs. Higgins*, 105 U. S. 582; 26 L. Ed. 1177, or *Atlantic Works vs. Brady*, 107 U. S. 200; 27 L. Ed. 438.

The Court also referred to the case of *N. J. Zinc Co. vs. Am. Zinc Co.*, 276 Fed. 733, 738, in which it is said:

“No Court has ever been able to formulate a test by which a satisfactory line can be drawn between the products of the inventors' intuition and the results of mechanical skill. That question must always be left for determination to the careful exercise of the judgment guided by the established rules of law.”

Among the established rules of law is, as well known, *the presumption of validity which attaches to a patent*. This presumption is disputable, of course. Nevertheless, "In this mode the law defines the nature, and the amount of evidence which it deems sufficient * * * to throw the burden of proof on the other party." (Greenleaf on Evid., Vol. 1, Sec. 33.)

No patent is issued without the examination at the Patent Office by an Examiner, skilled on the subject. And it is presumed that he has performed his duty. (Union Sugar Refinery Co. vs. Matthiesen, 24 Fed. Cas. 686, 688.)

In Cook vs. Ernest, 6 Fed. Cas. 389, the Court said that the decision of the Commissioner of Patents on the question of novelty "is a determination entitled to the highest respect of the Court and should not be reversed except upon the most satisfactory proof."

In Smith et al. vs. Woodruff (22 Fed. Cas. 703), the Court said: "The Court is greatly relieved, and will be so all the way up to the Court of last resort, by presumptions in favor of the finding by the (Patent) Office, to which is entrusted the determination of question of patents."

In Untermeyer vs. Freund (37 Fed. Rep. 343) the Court being in doubt, said:

"To state the proposition as fairly as the defendants can expect, the issue upon this branch of the case is involved in uncertainty. If the defendants' right to recover a sum of money in an ordi-

nary action at law depended upon their establishing the affirmative of this issue, a verdict in their favor would, probably not be disturbed by the Court. *If, however, the complainant's conviction of a crime depended upon the establishment by the prosecution of the same proposition, a verdict of guilty could hardly be sustained.*" The patent in question was sustained.

See, also, Walker on Patents, Sec. 76. And, in Cluett, et al, vs. Claflin, et al. (30 Fed. Rep. 922) the Court said:

"A voluminous mass of testimony has been returned upon the question of prior use. The greater part, however, may be laid aside, when it is remembered that this defense must be established by proof as explicit and convincing as that required to convict a person charged with crime; proof which *preponderates* the complainant's testimony *not only*, but which *satisfied the mind beyond a reasonable doubt.*"

There is another very potent reason for extending to patents for inventions the full effect of the presumption in its favor as above laid down.

Our patent system is based upon a *desire to reward those who have a progressive spirit, and devote their energy to improving the conditions of things.* The advance made by an inventor must, however, be relatively considered. All inventions are efforts to satisfy some want which is preceived to exist.

“The want may not have been apparent until some previous efforts, partially or imperfectly satisfying the more universal want, disclosed the subordinate and narrower need. Every successive improvement substitutes a better condition of affairs; and at the same time brings to light imperfections still to be overcome. As the end has become narrower and more special, the scope of the means devised to meet it necessarily becomes correspondingly contracted. Yet it is evident the narrowest and most technical invention which is devised to fill such special want is also entitled to protection.”
(1 Robinson on Patents, Sec. 88, Note 2, p. 134.)

Hence, the law “has no nice standard by which to gauge the degree of mental power or inventive genius brought into play in originating the new device. A lucky, casual thought involving a comparatively trifling change often produced decided and useful results, and though it be the fruit of a very small amount of inventive skill, the patent law extends to it the same protection as if it had been brought forth after a lifetime devoted to the profoundest thought and most ingenious experiments to attain it.” (Middleton Tool Co. vs. Judd, 17 Fed. Cases, 278; Robinson on Patents, Vol. 1, Sec. 83.)

The magnitude of the result achieved merely concerns the recompense of the invention.

The test of the inventive act is not its apparent simplicity after having been disclosed, but the prior ab-

sence of the means or end attained, though evidently desirable.

In *Hoe vs. Cottrell* (1 Fed. Rep. 597, 602), Shipman J., said:

“In the determination of the question whether there was invention in any particular combination, the important thing is to ascertain whether novelty and utility existed. It is true that these requisites may result from mere mechanical skill, and a new and useful combination may be formed by the mere mechanical addition to an old member to an old set of members; *but, when a device has a new mode of operation which accomplishes beneficial results, ‘Courts look with favor upon it,’ and are not exacting as to the degree of inventive skill which was required to produce the new result.*”

In *Pearl vs. Ocean Mills*, 19 Fed. Cases, pp. 56, 59, it is said:

“No more difficult task is imposed upon the Court in patent causes than that of determining what constitutes invention, and of drawing the line of distinction between the work of the inventor and the constructor. The change from the old structure to the new may be one, which one inventor would devise with the expenditure of but little thought and labor, and others would fail to accomplish after long and patient effort. It may be one which one whose mind is fertile in invention will suggest almost instantaneously, when the skilled

hand of the constructor will fail to reach the apparently simple result by the long and toilsome process of experiment."

Hence, now we can see clearly the wholesomeness of the rule of law above referred to, and which is so well stated in the case of Kirby vs. Beardsley, 14 Fed. Cases, p. 660:

"This difficulty (distinguishing between invention and construction) in connection with the general merit of inventors, as contributors to the material interest of society has inclined Courts to give a *liberal construction to the law, so as to protect every contrivance that can be called new, that proves at all useful. Care has been taken to give the benefit of doubt, as to originality, or creative thought to the inventor, so as to nourish inventive enterprise by lending encouragement to every degree of merit.*"

And, to give this beneficial rule of law its full effect, Courts will not allow the presumption of law in favor of patents for inventions to be overcome by proof of the alleged anticipating thing founded on *speculation*. The law will not be satisfied with conjecture, but *demand*s *certainty*. (Coffin vs. Ogden, 18 Wall. 124.)

A similar proposition as here involved was before the United States Supreme Court, in Loom Co. vs. Higgins (105 U. S. 591). The Court said:

"It is further argued * * * that * * * the devices * * * do not show any invention * * *

that the combination set forth is a mere aggregation of old devices well known, and, therefore, it is not patentable. This argument would be sound if the combination claimed by Webster was an obvious one for attaining the advantages proposed—one which would occur to any mechanic skilled in the art. But it is plain from the evidence, and from the very fact that it was no sooner adopted and used, that it did not for years occur in this light to even the most skilled persons. It may have been under their very eyes—they may almost be said to have stumbled over it; but they certainly failed to see it, to estimate its value, and to bring it into notice. * * * Now that (the combination) has succeeded, it may be very plain to any one that he could have done it as well. This often is the case with inventions of the greatest merit. It may be laid down as a general rule * * * that if a new combination and arrangement of known elements produce *a new and beneficial result*, never attained before, it is evidence of invention.”

The doctrine of the foregoing cases is well known to this Court. These cases are merely cited for convenient reference. Nevertheless they state what may be termed to be one of the fixed rules of law applied to a patented device in question when it shows a new and beneficial result.

The same question was most elaborately discussed quite recently by the Court of Appeals of the Second Circuit.

In *Kurtz vs. Belle Hat Lining Co.*, 280 Fed. 277, 279, involving the Hat Lining Patent, 1,216,140, February 13, 1917, which had been held to display nothing patentable in the District Court, the C. C. A. 2nd on reversing the lower decree said—after stating the facts: (Hough C. J.)

“Thus is presented the question of invention, admittedly one of fact, yet also one as to which courts, composed of lawyers, have long been anxious to act with uniformity and along lines of thought which will result in precedents, instead of mere incidents. Despite the warning of Justice Brown in *McClain vs. Ortmyer*, 141 U. S. 419, 427, 12 Sup. Ct. 76, 35 L. Ed. 800, that the word ‘invention’ ‘cannot be defined in such manner as to afford any substantial aid in determining whether a particular device involved an exercise of the inventive faculty or not’ the effort still continues. Prof. Robinson analysed all of these attempts down to his date of publication (1890), which was but a few months before Brown, J., pronounced the effort futile. *Rob. Pat. Vol. 1*, p. 116 et seq. Yet there remains as always worthy of consideration the learned author’s dictum that the mental faculties involved in the inventive act are the creative and not the imitative.’ Section 78. In comparative late years efforts at positive statement have been limited to such generalizations as that:

“Invention, in the nature of improvements, is the double mental act of discerning, in existing machine, or processes or articles, some deficiency, and pointing out the means of overcoming it.” *General Electric vs. Sangamo*, 174 Fed. 246, 251, 98 C. C. A. 154, 159.

“What may be called negative definitions or partial descriptions are still and always have been very common. Thus:

“Every result obtained by deliberate reflection and experimentation with well known appliances, or parts thereof, is not necessarily invention within the * * * patent laws.” Lord vs. Payne (C. C.) 190 Fed. 172.

“Invention involves conception of at least some function, as well as the selection of the means whereby that function can be operatively secured.” U. S. Co. vs. Hewitt, 236 Fed. 729, 150 C. C. A. 71.

“If * * * the mind advances from the known to the unknown by a transition natural to the ordinary instructed intellect, there is no invention.” Farnham vs. U. S., 47 Ct. Cl. 207.

Again a certain device was invention because—

“It was true discovery. It involved uncovering a thing which, while long capable of being done, was never before thought of. It also afforded a medium or means for bringing the discovery into practical action, and put it into the hands of others, there to be turned to pleasurable and profitable uses.” Cunningham vs. Aeolian, 255 Fed. 897, 900, 167 C. C. A. 217, 220.

“The enormous multiplication of improvement patents has produced such sayings as:

“It often requires as *acute a perception of the relation between cause and effect*, and as much of the peculiar intuitive genius which is characteristic of great inventors, to *grasp* the idea that a device used in one art

may be made available in another, as would be necessary to create the device de novo. And this is not the less true if, after the thing has been done, it appears to the ordinary mind so simple as to excite wonder that it was not thought of before." Potts v. Creager, 155 U. S. 597, 608, 15 Sup. Ct. 194, 198 '(39 L. Ed. 275).

"It has even been thought necessary of late to dwell upon the presumption; that a given device—

"certainly (was) not in an exact repetition of the prior art. *It attained an end not attained by anything in the prior art.* * * * it possess such amount of change from the prior art as to have received the approval of the Patent Office, and is entitled to the presumption of invention which attaches to a patent, *its simplicity should not blind us as to its character;* * * * *knowledge after the event is always easy*, and problems once solved present no difficulties, indeed, may be represented as never having had any, and expert witnesses may be brought forward to show that the new thing * * * was always ready at hand and easy to be seen by a merely skillful attention. *But the law has other tests of the invention than subtle conjectures of what might have been seen and yet was not.* It regards a change as evidence of novelty, the acceptance and utility of change as a further evidence, even as demonstration." Dimond, etc., Co. vs. Consolidated, 220 U. S. 428, 434, 31 Sup. Ct. 444, 447 (55 L. Ed. 527).

"The foregoing quotations which might be multiplied, only prove the truth of Justice Brown's dictum, and enforce the other truth which we attempted to

point out in *Kimball vs. Noesting* (C. C. A.), 262 Fed. 148, viz.: that invention is a question to be decided on the evidence. The problem is the more difficult because evidence as to invention does not often give rise to conflicts of fact in the ordinary sense of that phrase; it does, however, give rise to acute differences of opinion as to the inferences to be drawn from facts in themselves uncontradicted; and this is as true of what is called 'opinion evidence' as it is of testimony regarding things visible or tangible. It is probably for this reason that experience has dictated *some canons of decision* (they are not rules of law) as to how the problem of invention is to be approached.

"Thus it has been well said that "in determining this question it is proper to bear in mind *the condition of the trade as well as the art to which the patent in suit is allied.*" *Warrent, etc. Co. vs. Am. etc. Co.* (C. C.), 133 Fed. 304, 306. And similarly that the "*effort (of the court) must always be to view the subject matter from the standpoint of the art concerned.*" *Kurtz vs. Blatt* (D. C.), 263 Fed. 392, 394. It is also the duty of the Court to construe patents *liberally*, so as to effect their real intent. *Bossert vs. Pratt*, 179 Fed. 385, 397, 103 C. C. A. 45. And cf. *Auto Vacuum Co. vs. Sexton*, 239 Fed. 898, 153 C. C. A. 26.

"Yet, when all has been done, the question of invention may 'be answered differently by persons of equal intelligence.' *Bossert vs. Pratt*, *supra*, 179 Fed. 386, 103, C. C. A. 46. We think, also, courts have always endeavored to observe at least some of Prof. Rob-

inson's guiding rules (*supra*), as that the nature of an invention is usually ascertained from examining the inventive act from which patented matter results; for invention always generates a new idea, although a patentee must create the means, and not merely perceive the end.

“Result is that study of well considered decisions under this head will always show that result is reached very largely from examination of *‘the results obtained.’* Doble vs. Pelton, etc. Co. (C. C.) 186 Fed. 526 (S. C. 190 Fed. 760, C. C. A. 9th). *Results are described by abstract nouns, like ‘simplicity,’ ‘Economy,’ etc., and, while it is always admitted and stated that the mere attainment of such desirable results is not invention, they always have been and must be used as evidence or indicia of invention, and the weight and probative effect of such remarks of excellence have varied, and always must vary within limits according to the personal equation of the fact trier.*

“*Thus, while neither simplicity, cheapness, nor utility—nor all three combined—constitute invention, they have been deemed most potent evidence thereof.* Barry vs. Harpoon Co., 209 Fed. 207, 126 C. C. A. 301. *Simplifying form and cheapening cost have been accorded the same potency (Hunt vs. Milwaukee, etc. Co., 148 Fed. 220, 78 C. C. A. 116) although, of course, such excellence must always be accompanied by a ‘different result’ (Bernz vs. Schaefer (D. C.), 205 Fed. 49, 52). Indeed, it has been thought that simplicity alone, though ‘cited as evidence of lack of invention, to our minds shows a high order of novelty and invention’ (Con-*

solidated, etc., Co. vs. Window Glass Co. (C. C. A.), 261 Fed. 362, 375), and to the same point Hills vs. Hamilton Co. (D. C.), 248 Fed. 499.

“Utility, though itself not invention, nor conclusive evidence thereof, has been practically accorded the greatest weight. Union, etc. Co. vs. Peters, 125 Fed. 601, 60 C. C. A. 337; Woerheide vs. Johns-Manville, 220 Fed. 674, 136 C. C. A. 316. Cf. Greenwald vs. LaVogue, 226 Fed. 448, 141, C. C. A. 278. Novelty, likewise, has been pushed to the front as a piece of evidence. Concrete, etc. Co. vs. Meinken (C. C. A.), 262 Fed. 958, 965.

“The imitation of a thing patented by a defendant, who denies invention, has often been regarded, perhaps especially in this circuit, as conclusive evidence of what the defendant thinks of the patent, and persuasive of what the rest of the world ought to think. David vs. Harris, 206 Fed. 902, 904, 124 C. C. A. 477; Smith vs. Peck (C. C. A.), 262 Fed. 415, 417. Commercial success has been too recently and too often considered to justify much citation, but, however unsafe as a guide (Boston, etc. Co. vs. Automatic (C. C. A.), 276 Fed. 910), it has always been a powerful piece of evidence, especially when the prior art shows no success along the same lines (David vs. Harris, supra).

“The list of laudatory epithets descriptive of what is considered evidence is by no means exhausted; the ‘marked superiority of the article’ constructed under the patent (Frost vs. Cohn, 119 Fed. 505, 56 C. C. A. 185); ‘a marked improvement in product’ (Greenwald

vs. Enochs, 183 Fed. 583, 106 C. C. A. 351); the 'ingenuity and popularity' of the patentee's product (Fligel vs. Sears, 254 Fed. 698, 166 C. C. A. 196); The 'unchallenged supremacy' of the same (Consolidated, etc. Co. vs. Firestone, etc. Co., 151 Fed. 237, 80 C. C. A. 589); and even the aid given by the patented article in 'advertising and identifying' an entirely different product (Fonseca vs. Suarez, 232 Fed. 155, 156, 145 C. C. A. 347—have all been used and we think properly so, as evidence of invention.

"Patentability has often been found '*in discovering what is the difficulty with an existing structure and correcting the same, even though 'the means' are old, and their mere' adaption to the new purposes involves no patentable novelty.*' Miehle, etc. Co. vs. Whitlock, 223 Fed. 647, 650, 139 C. C. A. 201. *Hindsight, or wisdom after the fact, has always been looked upon with disfavor; e. g., Faries Co. vs. Brown, 121 Fed. 547, 550, 57 C. C. A. 609.*

"If we viewed this hat lining, or any hat lining, in the light of our own experience, it would appear trivial and unworthy the dignity of patent protection; but, looking at it through the evidence and (we hope) *with the eyes of the hat lining trade*, this patent represents a large and successful business. It is in the minds of all those who deal in hat linings, of the utmost importance. No one ever made a lining of such *simplicity, cheapness, and general adaptability* as has Kurtz and he has done it by mechanical means of winning simplicity, *to all of which defendant has testified by de-*

liberately imitating Kurtz's product and engaging in expensive litigation to defend the imitation.

“We are of the opinion upon this record that Kurtz's hat lining is novel, useful and displays patentable invention.”

Decree reversed, with costs.

As further instances that the courts recognize and abide by said canons the following cases are in point:

In Ottumwa vs. Christy Co., 215 Fed. 362, 369 (C. C. A. 8th) the Court said:

“It constitutes no anticipation and no defense to a claim of infringement that one or more elements of a patented combination or one or more parts of a patented improvement, may be found in one old patent or publication, and others in another, and still others in a third. It is indispensable that *all* of them, or their mechanical equivalents be found in the *same* description or machine, where they do substantially the *same work*, by *the same means*.”

In Imhauser vs. Bueck, 101 U. S. 647, 660; 25 Law. Ed. 945-947, the Supreme Court said:

“It is not pretended that any one of them embodies the *entire* invention secured to the complaint in his letters patent, * * * but it is insisted that each contains *some* features, devise or partial mode of operation corresponding in that particular to the corresponding feature, device or *partial* mode of

operation exhibited in the complainant's patent. Suppose that is so, still it is clear that such a concession cannot benefit the respondent, it being conceded that *neither of the exhibits given in evidence embodies the complainant's invention (i. e., the whole invention) or the substance of the apparatus described and claimed in his specification.*"

"The utility of the change, as ascertained by its consequence, is the real practical test of the sufficiency of an invention."

Smith vs. Goodyear Dental Vul. Co., 93 U. S. 486-495; 23 Law. Ed. 952.

In Warren Steam Pump Company vs. Black & Knowles Steam Pump Works, 163 Fed. 263, 280 (1st Cir. 1908), the Court said:

"In an art so highly advanced as the pump art, where all the elements which enter into the construction of a pump may be said to be old, where most conceivable conditions of use have been presented to engineers, and where the art exhibits the greatest variety of form and structure, it is impossible in many cases, as an abstract proposition, to draw the line between invention and the skill of the designer. There is, however, strong evidence of invention where 'we have presented the circumstances such as exist with respect to the patents, in suit, namely, a *demand for a more efficient air pump*, the *failure to previous efforts* to meet this demand, the *immediate success* of the patented device, and its great utility.'"

In Kalamazoo Ry. Supply Co. vs. Duff Mfg. Co., 113 Fed. 264; (6th Cir.), and in Kinloch Tel. Co. et. al. vs. Western Electric Co., 113 Fed. 659, 665 (8th Cir.), the Court held that:

When the question of patentable novelty is fairly open to doubt the practical success of the device and the fact that it *displaced similar devices*, is sufficient to turn the scale in favor of the invention.

The deliberate *choice* of a patented device over other known devices is the basis of *the evidential value of "extensive use"* as a factor in determining any doubt as to the invention in favor of patentee.

The defendant's use of a patented device has been regarded time and again as amounting to a *quasi estoppel*, with respect to denial of patentable novelty. T. H. Symington Co. vs. Miner, 216, Fed. 198.

The infringement by defendant is evidence that there must be something worth while to infringe: something which defendant must appropriate in order to present to the public what is demanded.

In Diamond Rubber Co. of New York vs. Consolidated Rubber Tire Co. and Rubber Tire Wheel Co., 1911, 220 U. S. 428; 55 L. Ed. 527, the Supreme Court held (p. 442) that the fact that defendant copies the device disclosed and claimed in complainant's patent, *particularly where the patent was a very restricted one*

and easy to evade is very strong evidence that it is substantially different from the devices of the prior art (p. 442) “and we may say, in passing, the elements of a combination may be all old. In making a combination the inventor has the whole field of mechanics to draw from”.

In *Coffield Motor Washer Co., vs. Howe Mach. Co.*, 190 Fed. 42, the Court said (citing a number of cases) :

“The utility of a patented device may be attested by the litigation over it.”

In *American Caramel Co. vs. Glen Rock Stamping Co.*, 201 Fed 363, the Court held that the *infringement of an improvement patent is a practical admission of the utility and novelty of the patented improvement.*

In *Hobbs vs. Beach*, 180 U. S. 383, 393, (45 Law Ed. 586), the Court remarked that invention rather consists in *the idea* that the change could be made than in making the necessary mechanical changes.

In *Neill vs. Kinney*, 239 Fed. 309, 313, (C. C. A. 3d) the Appellate Court in reversing the lower Court held:

That in looking for invention in a combination of old elements the Court is guided by the new and useful means which the combination may afford, or the new and useful results which may be obtained from it. Where a number of old elements each performs very much its old function, but *collectively* they produce *new and better results invention is involved in associating them together.*

The patent there reviewed was a derrick. The Court said, (p. 314) :

While the derrick of the patent, in view of its position in the art, is not * * * a great invention, yet *it has in combination* in a novel and useful way the qualities of *simplicity*, portability, *durability* and *economy*. We are, of course, aware that a mere summation of points of merit does not constitute invention any more than a mere aggregation of elements. Yet *their presence in a marked increased measure cannot be overlooked* in estimating the utility of a device and in determining whether it produces new and useful results within the principles upon which patents are granted.

The bifurcated arm idea is not an abstract element in the combination here in issue.

In Southern Textile Machinery Co. vs. Fay Stocking Co., 269 Fed. 243 (C. C. A. 6th Cir.), the Court said that:

An improvement cannot properly be said to be in one element alone, and hence not rightly protected by a claim for a combination, when the *change in the element required corresponding changes in the form and adjustment of co-operating parts to unite in producing the desired results.*

And see in Ohio Rake Co. vs. Bucher & Gibbs Plow Co., 266 Fed. 393, 394, (C. C. A. 6th).

General Electric Co. vs. Wagner Electric Co. et al., 130 Fed. 772 (C. C. A. 2d).

Where complainant's device is adapted to attain the objects stated in his patent and practical results are secured thereby, and the devices of the prior art are impracticable and insufficient to secure complainant's results, and *defendant bodily appropriates complainant's construction*, such facts are *most persuasive* upon the question of invention.

"We have been unable to find in the prior art any single device, or any *sufficiently definite* suggestions derivable from the various devices, which sustain the contention of defendants that the patented improvement is merely the result of mechanical skill. The reasons for the conclusion that the patented device involved invention sufficiently appear from a comparison of its construction, adapted to attain the objects stated in the specification and the practical results thereby secured, with the impracticability or insufficiency of the devices of the prior art. *The failure of defendants to avail themselves of said earlier devices or improve them, and their bodily appropriation of the patented construction, is most persuasive upon the question of invention.*"

Sanders vs. Hancock, 128 Fed. 424 (C. C. A. 6th)

Where a series of improvements has culminated in one which contributes decisively to the utility of a machine which others have been long trying to make operative, there is displayed more than the insight of a workman skilled in the art.

A court, having regard to the presumption of validity arising from the grant of a patent, the success which it has attained, the *non-existence of any complete anticipation*, and *the adoption of it by the defendant in his business with express notice of the patent and with a view to profit by it*, may hold a combination claim of narrow novelty valid.

The appellees made some attempt to belittle the Cleveland structure, pretending they found it necessary to cease using it—although they put in an identical and infringing structure in 1923 at Vancouver, Wash. If the appellee Sumner Iron Works had only in good faith lived up to such claim, it would not now be required to defend its acts. As it is, the remarks of the Supreme Court, speaking through Chief Justice Taft in *Eibel Process Company vs. Minnesota & Ontario Paper Co.*, 261 U. S. 46, 67 L. Ed. 523, are in point:

“The defendant invites attention to the fact that one or two paper makers are increasing this head and *giving up* the pitch, for the purpose of increasing the speed of the stock. We do not see that these circumstances in any way affect the validity of the Eibel patent. If defendant or others can do what Eible accomplished in *another way*, and by means he did *not* include in his specifications and claims, i. e., by additional head and the abandonment of a substantial pitch, *they are at liberty to do so* and avoid infringement.”

In *Turrill vs. R. R. Co.*, 68 U. S. 510, 17 L. Ed. 668, the Court said:

“Patents for invention are *not to be treated as mere monopolies*, and, *therefore, odious* in the eyes of the law; but they are to receive a *liberal construction*, and under the fair application of the rule, *ut res magis valeat quam pereat*, are, *if practicable, to be so interpreted as to uphold, and not to destroy, the right of the inventor.*”

In *Providence Rubber Co. vs. Goodyear*, 76 U. S. 788, 795, 19 L. Ed. 566, the Court said:

“*Liberality* rather than strictness should prevail where the fate of the patent is involved, and the question to be decided is whether the inventor *shall hold or lose* the fruits of his genius and his labors.”

In *McClain v. Ortmyer*, 141 U. S. 419, 425, 35 L. Ed. 800, 804, the Court said:

“It is true that in a case of doubt, where the claim is fairly susceptible of two constructions, that one will be adopted which will *preserve to* the patentee his actual invention.”

See also *Topliff v. Topliff*, 145 U. S. 171.

What might have been done with a prior device cannot be urged in aid of the defense of anticipation.

Miehle Printing Press Co. vs. Whitlock Co., 223 Fed. 647.

As said by this Court in *Los Alametos Sugar Co. vs. Carroll*, 173 Fed. 280-284:

“The alleged prior device must have been complete and capable of producing the desired result. One should not be deprived of the results of a successful effort merely because some one else has come near it.”

In *Naylor v. Alsop Process Company*, 168 Fed. 911, 920, (C. C. A. 8th), Judge Amidon said:

“When it is sought to ascertain the state of the art by means of prior patents, nothing can be used except what is disclosed on the face of those patents. Such patents cannot be reconstructed in the light of the invention in suit, and then used as a part of the prior art.”

In *Carnegie Steel Co. vs. Cambria Iron Co.*, 185 U. S. 403, 46 L. Ed. 968-1005, Mr. Justice Brown said (p. 446):

“It only remains now for the wisdom which comes after the fact to teach us that Jones discovered nothing, invented nothing, accomplished nothing.”

In *Diamond Rubber Co. vs. Consolidated Co.*, 220 U. S. 428, 55 L. Ed. 527, Mr. Justice McKenna said (pp. 434, 435):

*“Its simplicity should not bind us as to its character. * * * Knowledge after the event is always easy and problems once solved present no difficulties, indeed, may be represented as never having had any, and expert witnesses may be*

brought forward to show that the new thing which seemed to have eluded the search of the world was always ready at hand and easy to be seen by a merely skillful attention. But *the law has other tests of the invention than subtle conjectures of what might have been and yet was not.* It regards *a change as evidence of novelty, the acceptance and utility of change as a further evidence, even as demonstration.*”

In the Court below appellees cited, and apparently relied upon, the following cases:

Adams vs. Bellaire Stamping Co. (141 U. S. 539, 35 L. Ed. 849)

in which the Court said:

“The court did not * * * err in refusing the instruction requested that before the patent could be held invalid by reason of a prior patent it was not sufficient to find one of the elements in one patent and the second in another, and a third in another.” But, the Court added, “*If the patent were for a combination of new or old elements producing a new result, such instruction might have been correct.*” * * *

Duer vs. Corbin Co., 149 U. S. 216, 37 L. Ed. 707,

in which the Court remarked:

“*All that he claims as invention is found in one or more of the prior patent.*”

The construction described in Claim 12 of the Cleveland patent is *not found* in any preceding patent or device.

McMillin Co. vs. Androscoggin, 291 Fed. 134
(D. C.)

The patent (1,173,290 Feb. 29, 1916) considered was for a cloth board. The Court found no new result produced by the invention.

Hollister vs. Benedict Co., 113 U. S. 59, 28 L.
Ed. 901.

The Locke patent (9339, Aug. 3, 1869) was involved. It covered a printed label "designed more especially for use in sealing liquor casks with identifying marks." The prior art showed a stamp giving the same result. Infringement could only have been found by giving the claim a broad interpretation.

Huebner Co. vs. Matthews Gravity Carrier Co.,
253 Fed. 435 (C. C. A. 6th).

Considered patent No. 890,917, June 16, 1908, to Matthews & Lister, and No. 978,466, Dec. 13, 1910, to Matthews both for gravity carriers. The features emphasized in the claims were: Metal side rails and rollers; stationary axles, with revolving rollers, sectional frames, ball bearings: The Court remarked:

"Every element of the claims in suit is old, what has been done here is to adapt and substitute some old and familiar devices in place of certain parts of the earlier gravity carriers. * * * This in-

volved for the most part simply a change in material. * * * The substituted devices practically performed not only the same functions as had been performed by the replaced parts, but also the same functions as they themselves had performed in devices of the prior art * * * and the result achieved is *exactly* the same as the old one."

In which of the alleged anticipating devices in the case at bar is there found an easily cast A-shaped bed-plate that is tapered toward the front end which is provided with a bearing, and the arm is bifurcated so that it may be mounted astride the bearing?

In the case at bar we have these *new features and new results*: Parts are more easily and more cheaply cast. The device is stronger as a whole. The parts are specially constructed mutual to support each. *One bed-plate could be used for either arm-unit*, as against the preceding log turners requiring a different bed-plate for each arm-unit. Appellee Sumner Iron Works paid the new combination and results so achieved the tribute of adopting them for the manufacture of its *STANDARD log turner*.

After the fire in Sumner Iron Works shops in 1913 it involved the same expense to make the changes in construction one way or the other; yet appellee did *not* adopt a device like Defendants' Interrogatory Exhibit "A" which Mr. Sumner had seen in Frazier River, Canada, in 1906, but instead adopted "a *structure very*

similar to that shown in Mr. Cleveland's patent here," as Mr. Sumner said. (Trans. 68).

Appellees seem to have deduced a false canon from their cases, namely: that there are no generally recognized canons of decision governing the premises. In other words that each judge must decide the issue of patentable novelty according to his own impressions; that is, upon the impression the patented object makes upon the Judge in the light of his *own* experience, *as distinguished* from "*looking at it through the evidence with the eyes*" of those versed in the industry with which the invention is related (Kurtz vs. Belle Hat Lining Company, Supra). But no such doctrine is affirmed by those cases.

Appellees also contended that the presumption of validity usually attaching to a patent is in the instant case seriously impaired because the Examiner in the Patent Office failed to cite as references the patents which Appellees pleaded in their answer. Such might be true if the patents were real anticipations (American Can Co. vs. Golden Mfg. Co., 290 Fed. 523).

But in the case at bar the Appellees themselves negatived the pertinency of the patents pleaded by them. In answer to the following interrogatory:

"Specify as to each of the patents cited in paragraph XIV of the Answer herein, the particular mechanical feature or combination of parts described therein, on which the defendants will rely on the trial of this case as instances of prior publication of the patented invention here in suit"

the Appellees said:

“None of the patents designated in said interrogatory *are relied upon* to show an *exact* duplication of the construction shown in the patent in suit, but all show, collectively, that prior state of the art upon which said patent was predicated, and show it to *anticipate* any invention exhibited in the subject matter of Claim 12 of said patent as the sole claim relied upon by plaintiff.”

In the first place, Appellees had the burden of establishing, convincingly, the pertinency of said patents *not* as suggesting an element of the combination, but of suggesting the combination in its entirety.

But the argument need not be extended any further, for the principles which govern the issue here involved have also been repeatedly and clearly announced by this Court. One instance is found in the case of *Doble vs. Pelton et al.*, 186 Fed. 526, so ably decided by the late Judge Van Fleet (referred to by the C. C. A. 2nd in its above abstracted opinion expressed in *Kurtz vs. Belle Hat Lining Company* (*Supra*)).

The patent there considered was the reissued patent to Doble, February 27, 1906, No. 12,460, for an improvement in Nozzles for Impact Water Wheels. The problem involved was the providing of a needle valve arranged “to permit the use of exterior means for moving the needle valve back and forth.” In order to accomplish this the nozzle had to be curved, but this resulted in a reactive force tending strongly to turn the

nozzle (763). "To overcome this tendency, Doble conceived the idea of *curving* the nozzle so as to place the axis in the plane of the nozzle's sinuosity."

Infringement was not denied; but the defense vigorously asserted anticipation, non-invention, aggregation—just as in the case at bar.

Judge Van Fleet said with regard to the contention that the invention did not represent a true combination:

"It is well established you *cannot construe* a patent for a combination, such as this, *with reference to novelty as to any distinct separate feature*; for that purpose *the device is to be judged as a unit, and it is to be determined from its unitary use* whether it is a valuable combination or whether a mere aggregation. *You cannot take it piece meal* and finding that its various elements have been anticipated in different devices of the prior art, none of which, however, cover *all* of the elements which are to be found in the combination, and thereby successfully sustain a defense of the anticipation. You must find *all* the elements of the combination *or their equivalent* in some particular device which is claimed to be in anticipation."

This Court, in reviewing and affirming said case (190 Fed. 766; opinion by Judge Gilbert) said:

"There can be no doubt of the value of appellee's invention. Its value is conceded in the evidence. It has gone into general use and it has

superseded all prior combinations * * * (763)

“It is urged that the addition of this feature to the combination does not show invention; that it was to do the obvious thing, that which any mechanic would have done when called upon to remedy the known defects of the prior devices.

“To this it is to be said among other things that although the defects of the nozzles which had been in use for many years prior to Doble’s invention were well known and recognized, and mechanics and engineers had been called upon to remedy them, no one prior to Doble thought of the simple expedient of changing the axis of the pipe from the horizontal to the perpendicular. That one step in the art marked success in the combination.” * * *

“It is contended that the claims of the Doble patent cover a mere aggregation of elements, and not a true combination. An *aggregation* is the mere assembling of separate elements *without changing their respective separate functions or accomplishing any result other than the added results of those functions*. In order to be patentable, a combination of elements must in their co-relation produce a different force, or effect, or result, from the sum of that which is produced by their separate parts. *Reckendorfer vs. Faber*, 92 U. S. 347, 23 L. Ed. 719. It is not necessary that each element in performing its own function shall also modify the function performed by the others. *Hailes vs. VanWormer*, 20 Wall. 353, 22 L. Ed. 241. *It is*

generally sufficient if there be such coaction that a result is produced which is NEW, AND THE RESULT IS NEW IF it is substantially a better result than that which has been accomplished by other combinations. Loom Co. vs. Higgins, 105 U. S. 580, 26 L. Ed. 1177.

“The fact that there is novelty in one of the elements, as in the present case in the change of the plane of the nozzle pivot, does not justify a claim to a combination of the elements, unless there is coaction between them to produce a new result, and a combination is not unpatentable merely because the result *might* have been accomplished by other combinations. The claims of the patent in suit cover a hydraulic apparatus consisting of an impact wheel with buckets, a nozzle pipe of double curved form for directing a stream of water upon the bucket, means for varying the amount of water discharged from the nozzle, and a supply pipe to which the nozzle is pivoted on an axis in the plane of its sinuosity, and substantially parallel to the axis of the wheel. We think there can be no question that the elements so described co-operate to produce a *single* result, which is the *perfect regulation* of the jet, together with the greatest *practical economy of water*. The means for varying the amount of water discharged from the nozzle is the needle valve, and this not only controls the volume of the jet, but through the action of the governor it also controls the direction of the jet. The nozzle pivoted to the pipe line in a plane at right angles to the plane of its curva-

ture renders the nozzle sensitive to the deflecting power of the governor. The result is *a successfully working combination*, one that marks a distinct improvement upon any prior combination. *This result would not be produced by the elements in their separate state, or as assembled in a mere aggregation without co-operation and functional relation to each other.*"

Thus two canons which govern the premises may be stated as follows:

(1). The alleged anticipation must be considered *as it existed* when the patented improvement was made, and *not* in the light of *what might have been done* with it,—because that would call in the aid of *hindsight*.

(2). *Any change* made by the patentee in the alleged anticipation by which *some new and beneficial result*, according to the evidence is attained, is *looked upon with favor and liberality*, and the court *will not measure the degree* of the change, nor of the new result or the benefits flowing therefrom. But the court *will cast the burden upon him who charges anticipation or non invention*, in the face of a beneficial change, however slight, to substantiate his affirmation by proof sufficient to convince beyond any reasonable doubt.

The degree of the new and beneficial result affects the use of the improvement only; *particularly so where the improvement is specific and may be easily evaded* by those not considering it of sufficient importance to

warrant the payment of any consideration for its use.

Any other rule would nullify the presumption of novelty which attaches to a patent; would also *reverse the burden* by requiring the patentee instead of the infringer to convince the Court.

And yet that would be the result in the case at bar if the decision of the court below were to be upheld.

The combination was not anticipated by any similar combination. The trial court conceded that. It said (Opinion, Trans. 167) :

“The use of a push-arm in a log turning device, bifurcated and straddling the bearing formed upon the outer end of the bed-plate is not sufficient in my opinion, in view of the prior art, to constitute invention.”

Such statement is a clear admission that to the mind of the lower Court *the combination* was not shown by the prior art. Such view is further confirmed by the fact that the trial Court specially referred to the fact that “push arms” as such are old in the art, and while these “were straight with a single bearing on the shaft, or two such arms with a distance plate bolted between them”—the Court was of the opinion that since such arm was for the same purpose, that is, turned the log in the same way, there was no invention in the Cleveland patent to be predicated upon the use by him of “an arm divided or forked at the lower end.”

The District Court overlooked entirely the change made by Cleveland in the bed-plate so that *his* forked

arm could be placed astride of the single bearing provided on the tapered front end of the bed-plate, whereby the parts mutually supported each other. The changes so made were *cooperative changes* and they were original with Cleveland.

It is evident from said expressions of the Court below that it lost sight entirely of the benefits achieved by Cleveland: *greater strength, economy*, and the fact that *a single casting could be used effectively for both arm units*; thus disregarded the factors which caused appellees, after direct notice of the Cleveland patent to adopt his construction and *make it their "standard"* log turner, notwithstanding they had to face litigation in so doing.

The anticipation is not even effected by synthesis, because the effects of the elements upon each other were not known, and *could only be ascertained by trial*. It was not a mere question of *how* the arm-units of the log turner would work. They would turn the logs beyond question; but *the real question was how would they stand up under the hard service to which subjected?* Would there be a *saving* in repairs? And coupled with these questions was the further question, Could the cost to the consumer be reduced? (Mr. Hines, Trans. 112.)

In the invention here in issue all these questions are affirmatively answered by the evidence. As Mr. Demageon said (Trans. 141):

The Cleveland device exhibits "*the greatest strength obtained at minimum cost.*"

“The arm (push or hook) being bifurcated and having considerable spread and supported on each side of the bearing is stronger * * * than the type of arm shown in (Defendants’ Inter.) Ex. A.” Mr. Hines said the same thing (Trans. 109).

Appellees evidently thought so, too, otherwise they would have adopted the Ex. A construction instead of appropriating the Cleveland patent.

Patentee Cleveland manifestly was enterprising, and spent *some* thought, energy, experimentation and money on his improvement. And *some* new and beneficial result was so attained, as admitted by appellees’ own acts in the premises.

Shall the appellees be allowed to appropriate all that and profit by it, *without* any compensation to Cleveland and his assigns? Would such result promote the advancement of our arts? Hardly.

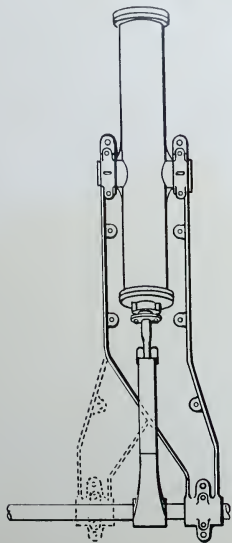
It is submitted, therefore, upon the evidence in this case that the decree of the lower Court was wrong and should be reversed.

Respectfully submitted,

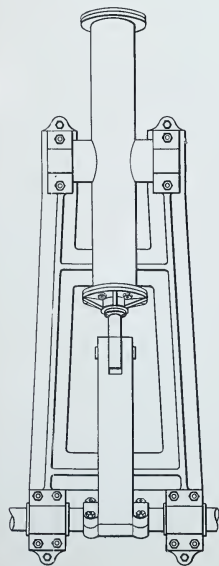
T. J. GEISLER,
Counsel for Appellant.

DIAGRAM ILLUSTRATING, BY COMPARISON, THE DIFFERENCE BETWEEN CLEVELAND'S LOG TURNER DESCRIBED BY CLAIM 12, AND THE DEVICES WHICH APPELLEES CONTEND SUGGESTED THE INVENTION.

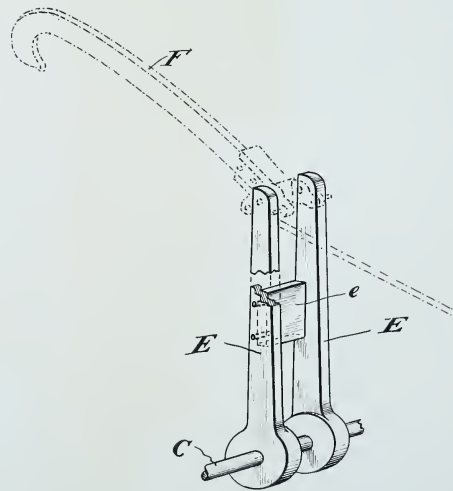
Diagrammatic representation of *evolution* of old crooked bed Simonson log turner, shown by Defendants' Inter. Ex. B, into straight-bed type seen by Summer at Frazer River, 1906, and shown by Defendants' Inter. Ex. A and Ex. 27. The dotted line section illustrates the change made.



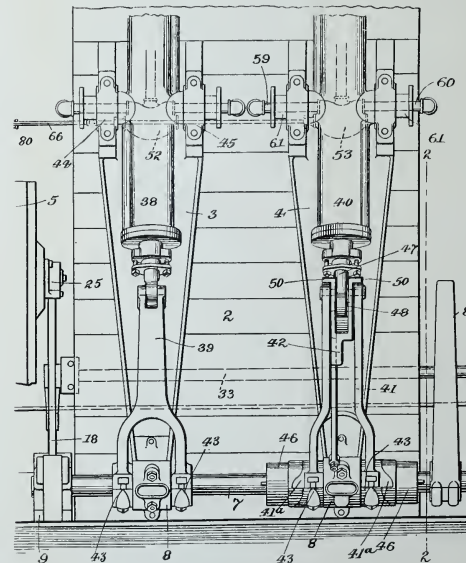
Diagrammatic representation *in plan* of push-arm unit shown by Defendants' Inter. Ex. A (Trans. 288 and Defendants' Ex. 27. Supplement to Trans. 6).



The Arm E (termed bifurcated by appellees) shown in Fig. 1 patent of Flavel Simonson No. 448,592, March 17, 1891, Defendants' Exhibit 29. The log turner shown in this patent had no bed-plate at all. Witness Thomas—for Defendants, Trans. 75 and see patent Trans. 210.



Left-hand portion of Fig. 3 of drawings of Cleveland patent showing the combination described by Claim 12 and covering both arm units.

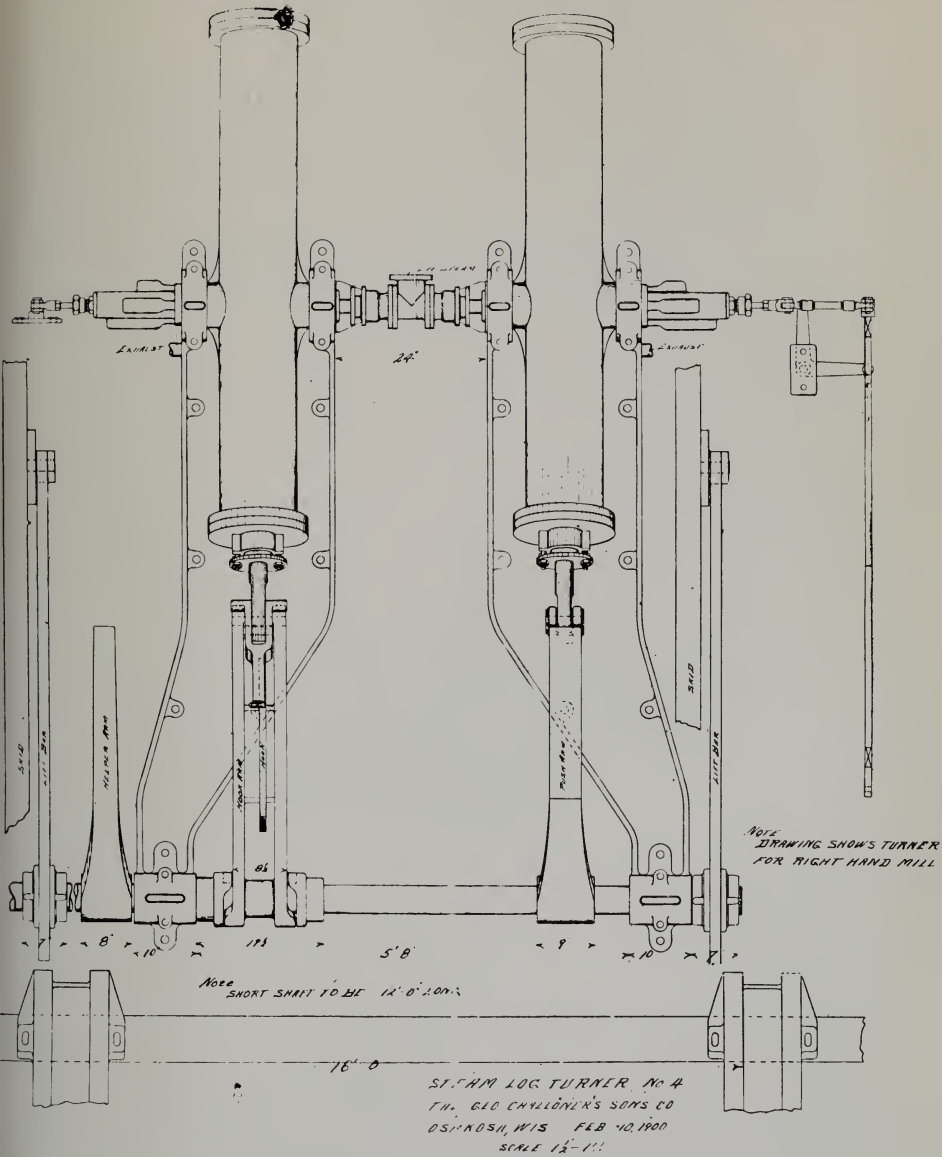


DEFENDANT'S INTERROGATORY EXHIBIT A

Being identical exhibit referred to in the Deposition of Chas. E. Cleveland
as Defendant's Deposition Exhibit B



DEFENDANT'S INTERROGATORY EXHIBIT B



Reproduction of Page 85 of The Timberman
of March, 1912

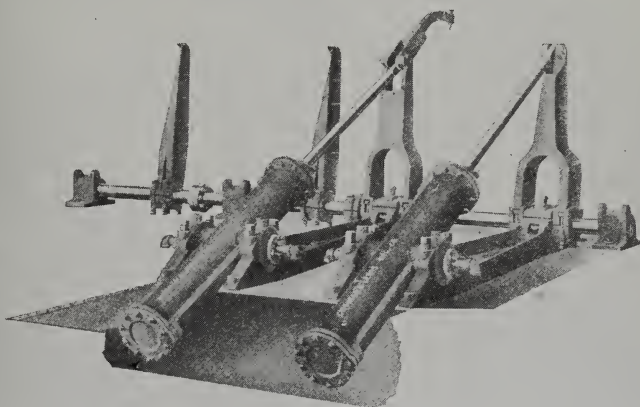
PLAINTIFF'S EXHIBIT 16

MARCH, 1912

THE TIMBERMAN

85

<p>HAZARD WIRE ROPE FOR EVERY PURPOSE</p> <p>HAZARD MANUFACTURING COMPANY WILKES-BARRE, PENNA.</p> <p>NEW YORK 306 ELY ST. PITTSBURGH 21 CONESTOGA BUILDING CHICAGO 352-354 WEST ADAMS ST.</p>	<p>HAZARD SPECIAL PLOUGH STEEL WIRE ROPE "OLYMPIC BRAND" FOR LOGGING PURPOSES</p>
<p>MARSHALL-WELLS HARDWARE CO., Portland, Ore., Seattle, Wash., Spokane, Wash., Agents</p>	



CLEVELAND'S IMPROVED
SIMONSON LOG TURNER
WITH INDEPENDENT STEAM SKID LIFT

No leaky trunnions, because valves are placed below the floor timbers.—Note the straight steel bed plates and forked hook and push arms.
If you are going to put in a Turner, better get the best and latest improved.

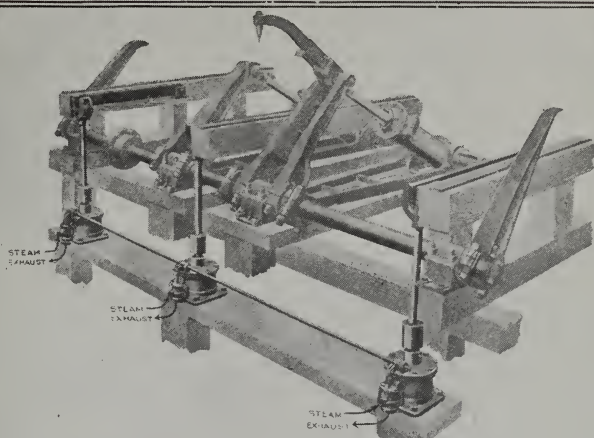
GIDDINGS & LEWIS MFG. CO.

FOND DU LAC, WISCONSIN

Photo Reproduction of Inside Page of Cover of The
Timberman of August, 1921

PLAINTIFF'S EXHIBIT 17

THE TIMBERMAN



Shows "SUMNER" Standard Log Turner with Lueth Patent Independent Unit Cylinder Skid Lift

LOG TURNERS—Built with 12 or 14 cylinders with 7 diameter shaft; length and number of arms as required. Beds and arms of cast steel; cylinders and boxes of cast iron.

INDEPENDENT SKID-LIFT—Lueth patent With a separate cylinder for raising each skid. Simple to install, most effective in operation, low cost of upkeep.



SUMNER-Combination Log Turner With Vapor Bar Operating up Through Drive Arm

Write for our Log Turner Bulletin No. 4

ORIGINATORS — NOT IMITATORS

SUMNER IRON WORKS

Main Office and Works at EVERETT, WASHINGTON

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Seattle Office, 200 First Ave South

Grays Harbor Representative:
W. H. Beane, 822 So. Tower Ave., Centralia, Wa

Canadian Plant at
Vancouver, B. C.



